M.R.O.—No. 1—2-10-50—2,000.

MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT.

G.O. No. Press Mis.

Dated 27 19

Not to be folded or roughly handled

Read the following papers.

No. 36. Extract from the Proceedings of the Chief Engineer, dated 12th June 1857, No. 1145.

Read the following letter from Major E. LAWFORD, Superintending Engineer, Southern Circle; to Colonel C. E. FABER, Chief Engineer, dated Camp Mysore, 3rd June 1857, No. 148:

SIR,

It is perhaps fortunate for the Public Service, however inconvenient to myself, that the South West Monsoon has this year set in so early as to expose me to a considerable degree of its force, on the march from Cannanore to Mysore, and thus to realize to my mind the obstruction during this season, of all, (except emergent) communication across the Peninsula by Trunk road No. 4. Indeed Cannanore is almost as much cut off from its sources of supply as if under blockade by sea and land, and the inconveniences which its inhabitants suffer thereby can be but faintly appreciated by residents of the Eastern side of the Ghauts. I have seen a considerable number of carts overtaken and stopped by the Monsoon, some laden with perishable goods such as salt and rice, and I have observed many dead cattle along the road which have fallen under the combined effects of exposure and fatigue. I had the greatest difficulty in inducing any Cartmen to undertake the march, and with less than half loads, it has been almost too much for the bullocks to accomplish. At the time I left Cannanore supplies of all kinds had risen in price, and some were almost exhausted. I was not previously aware how much Malabar depends on Coorg for the common staple of rice, but there is no doubt of the fact; and of the grevious hardship caused by the difficulty of communication.

2. I left Cannanore on the 25th May after a weeks continuous rain, and running by night for 20 miles I commenced my inspection at Ooyel, between which place and Gunooth lies the Irrity river which has been noticed in a separate report. The road is fair, but unable to bear any heavy traffic in wet weather, and requires metalling, and the same remark applies to the seven miles from Gunooth to the frontier of Coorg or stony river, a mountain torrent crossed by a truss bridge of 60 feet from which the ascent of the Perambady Ghaut begins.

3. This magnificent Pass has, I doubt not, been too fully and often described to need more than the expression of my admiration. It connects the name of Francis with one of the greatest improvements in Southern India, and only needs durability and permanent efficiency to render it perfect. The road however is not metalled, and the soil is of that description which at one season is pulverized to a degree that renders it extremely heavy and in the rains becomes all but impassable from mud. Between these extremes there are but few days in which the surface is really good, and on the whole, the state of the pass must be pronounced very unsatisfactory.

4. An estimate amounting to Rupees 12,700 for metalling and gravelling the Ghaut, including five miles of road, has been recently sanctioned (December 1856) but up to this time only a sum of Rupees 2,047-2-11 has been expended and that in a very doubtful manner. The Overseers employed here during the past two years in keeping the Ghaut in repair or the annual allowance of 100 Rupees per mile have unavoidably been left almost uncontrolled, and, it is to be feared that, much money has been wasted, if not worse. Overseers Church and Drysdale have both died from the effects of intemperance, and the repairs have for some time been entirely in the hands of a Native writer on 20 Rupees a month, who is placed in circumstances of temptation which are most unfavorable. Accordingly I find this man has allowed the Contractors for metal to use river shingle or pebbles instead of broken Stone, which, I need not say, must be entirely removed.

5. I am aware, though I cannot refer to the documents, that it has been determined to transfer the charge of the ghaut to the P. W. D. in Mysore, and I have accordingly forwarded to the Chief Engineer* of that Territory a Statement of the balance now available for metalling and requested Lieutenant Bean, to place that amount and a moiety of the maintenance allowance (Rupees 3,400) at Colonel Green's disposal. With these sums and under the greater facilities

* Letter, dated 3rd June 1857, No. 145.
Do. dated 3rd June 1857, No. 144.

Cannanore is almost as much cut off
from

enjoyed by the local executive Officer it is hoped the ghaut may be much improved in a few months while the District Engineer of Malabar will be easily able to attend to the works required within the limits of that Province.

6. But I would not lead the Government to suppose that this outlay is more than a fraction of what is required to place the road in proper condition for keeping the traffic open all the year round. The estimate is inadequate for efficiency over the distance it provides for, and I consider that not less than 1,500 Rupees a mile per 68 miles or about one lac of Rupees should be laid out on this road in the next five years. This calculation, though general, is not mere guess work as it allows about 1,500 cubic yards of broken stone at one Rupee per yard per mile.

7. It is also necessary to build two additional Travellers bungalows between Gunooth and Cannanore (viz. at Chavacherry and Codally a distance of 30 miles which cannot be made in less than three marches in the rains.

8. Wells are required at the stony river and at Gunooth, Irrity and Chavacherry in order to afford a supply of drinking water during the hot weather when that from the rivers is most unwholesome.

9. Native Choultries and Soldier's sheds are essential from the stony river to Codally there being at present only one at Gunooth, while the Mysore Government provide one at each stage where there is a bungalow. Stabling and cattle sheds are equally necessary for no animals can bear the monsoon.

10. Were the above works carried out, the communication between Mysore and Cannanore would be uninterrupted throughout the year, and the expense could be easily recovered by means of a toll at the frontier. Mysore and Coorg have contributed nothing to the cost of the Perambady Ghaut while they have derived great advantage from it which would be largely increased if the road were permanently open. To a re-payment in the shape of toll levied on all classes, except foot passengers, none could object nor would the import be felt except beneficially in the Cannanore market which is now virtually closed for three months,

11. I have now endeavoured to lay before you, for the information of Government, a faithful picture of the actual state of this great communication between the Eastern and Western Coasts, of the political and commercial value of which it is not necessary to speak, and which no Railway will ever supersede, and I shall exceedingly rejoice if my opportune experience of its difficulties shall lead to timely and vigorous efforts for its improvement.

12. I ought to state that Captain Francis particularly drew my attention to the importance of including this road in my route either to or from Malabar.

13. There is one point in the future arrangements connected with this road which it may be as well for me to notice. The Madras Government should, I conceive, have some means of ensuring the proper conservancy of the line which is to be placed under Officers not responsible to them, but the whole cost of which is to be defrayed out of the Revenue of this Presidency. As a military road perhaps the best way would be to require its annual inspection by an Officer of the Quarter Master General's Department whose report being laid before Government could be furnished to the Commissioner in Mysore. This inspection should be made during or immediately after the monsoon.

Resolved that the foregoing very important Report from the Superintending Engineer Southern Circle of the present condition of the Perambady pass be immediately forwarded for the information of Government, and with the recommendation of the Chief Engineer that whilst the execution of so leading a communication is very properly in the hands of the Mysore Government, the periodical examination, suggested by Major Lawford, and report be continued with the District Engineer of Malabar, whose professional inspection, if communicated to the Commissioner in Mysore, would probably be more satisfactory than any other.

(Signed) C. E. FABER, Colonel,
Chief Engineer.

No. 37. From Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 3rd August 1857, No. 2618.

SIR,

Repair of the Perambady Ghaut.

No. 1782, dated 1st October 1856.
No. 2111, dated 12th November 1856.

With reference to the orders* quoted in the margin, I have the honor to bring to the notice of Government that an estimate for the repair of the Perambady Ghaut amounting to Rupees 12,700 was received in this office, and having been sent up for sanction on the 17th December 1856, was returned by Government with Extract Minutes Consultation No. 11, dated 3rd January 1857, but the repairs of the Ghaut have been going forward under the grant of 8,000 Rupees sanctioned on the 12th November 1856.

2. The estimate herewith re-submitted was drawn up by the late Acting Head Assistant Collector, and is accompanied by a report detailing the necessity and nature of the work, as well as the difficulties of the communication. The Government have now before them a report on this Ghaut by Major Lawford fully Corroborative of all Mr. Puckle's views and Statements but expressing his opinion that the future outlay to place the communication in good order must be much more considerable.

3. With such strong recommendations of vigorous and effective operatons recorded by Officers familiar with the locality, it cannot be necessary for me to do more than state my full concurrence in their proposals, and I would suggest that immediate sanction be given to the full amount of Mr. Puckle's estimate 12,700 Rupees including the 8000 Rupees already conditionally authorized.

4. But as the Ghaut itself is situated in Coorg, and much difficulty has been experienced in carrying on its repairs by the officers of Malabar, arrangements have been made for placing this part of the road under the Chief Engineer of Mysore by whose Department all future works may be executed, and the Madras Government should be furnished with periodical reports of the state and requirements of the communication.

5. As a Military Road of first-rate importance, the Perambaddy Ghaut cannot be neglected with impunity, and its repair to the full extent of the present estimate should be carried into effect between September and February next after which the Jungle becomes too unhealthy for such operations.

No. 38. ORDER THEREON, No. 1656; dated 29th August 1857.

The Perambady Ghaut referred to in the above papers, lies between Mysore and Malabar, being situated on Trunk road No. 4, running from Cannanore to the Mysore frontier, a distance of 68 miles. For the formation of this road an estimate amounting to Rupees 2,00,376 was first sanctioned* by the Honorable Court of Directors on the 3rd November 1847; and the late Board of Public Works, in submitting that estimate, stated in their letter of the 23rd December 1845, that it provided throughout for a road of the first class, and that all the Streams, except the Irritty Cadavoo, were to be bridged. From this report it might have been assumed that provision had been made for metalling the road, but a reference to the estimate shews that that was not the case. The work appears to have been commenced in February 1848, and completed in April 1853. The amount expended was Rupees 2,00,385-6-4 which exceeds by only Rupees 9-6-4 the authorized estimate for construction, and for annual repairs to the close of 1852-53. In Extract Minutes Consultation dated 14th October 1853, No. 389, Government expressed their satisfaction at the work having been done within the estimate; and observed that it was highly creditable to Lieutenant Francis. It was understood that all the work provided for in the estimate, was performed, with the exception of one Tunnel, which was to be built from the amount realized by the sale of stones and unserviceable tools.

* Vide para. 3, Extract Minutes Consultation 14th January 1848, No. 15.

2. On 25th October 1853, the late Superintendent of roads, Captain Johnston, forwarded an Extract from the Diary of Captain Ludlow, the then Acting Civil Engineer of the 7th Division, for June 1853, reporting on the then condition of the Perambady Ghaut and road. The road was stated not to be in the good order it should have been, and certain defects were pointed out, the chief being the want of metalling. Captain Johnston accordingly submitted estimates for metalling and other works, amounting to Rupees 13,131-7-10 as follows:

	Rs	A.	P.
For metalling and draining certain portions of the ghaut and road.	11,024	10	11
For constructing a bridge of 3 arches of 10 feet span at Codally....	775	4	9
Do. 3 of 15 do. do.....	1,334	3	2
Do. truss bridge across the Oorettie Toda...	1,395	10	0
	14,529	12	10
Deduct amount sanctioned in Minutes Consultation 27th January 1853 for a Masonry bridge over the Oorettie Toda.....	1,398	5	0
Total...	13,131	7	10

He also recommended that the annual maintenance allowance of 3,400 Rupees, formerly sanctioned, should be raised to 6,800, or from the rate of 50 to 100 Rupees a mile. The Government in Extract Minutes Consultation dated 2nd December 1853 No. 426, expressed their dissatisfaction at the state of the road and ghaut, as reported by Captain Ludlow; and after recording certain observations, sanctioned the sum applied for, and also raised the annual maintenance allowance to Rupees 6,800.

3. On the 19th August 1854, Government sanctioned on the representation of Captain Johnston, an estimate for the construction of a bridge over the Irrity river, amounting to Rupees 29,923-5-9. It was proposed that a toll should be levied on the bridge; but the Government observed that the proposition would come under consideration, when the Collector was able to report that the bridge was nearly completed, and was about to be opened for traffic. From papers subsequently laid before Government, they however learn that this bridge has not been built, in consequence of some objection to the site originally proposed; and the Chief Engineer's letter of 1st August 1857, containing his opinion on the subject, has been separately disposed of in the Extract Minutes Consultation of the 24th Idem, No. 1630.

4. Thus the aggregate sanction on the Perambady Ghaut and road, inclusive of maintenance allowance, and exclusive of the sum sanctioned for the Irrity bridge, amounts to about Rupees 2,35,000, or Rupees 3,456 a mile. From a letter addressed by Captain Rolston, Sub Assistant Commissary General, to Colonel McCally, Commissary General Madras, under date 29th August 1856, the Government learnt that notwithstanding the large outlay of Rupees 2,35,000, a portion of the road between Cannanore and the top of the Perambady pass was in a very bad state; and the injurious consequences to the bazars in Cannanore, and to the general well being of the inhabitants and the neighbourhood, owing to want of proper communication, were then prominently brought to notice. It was reported on that occasion that the depth of mud in some places was nearly two feet, and that it was of such a tenacious clayey description, as to render it utterly impossible for a country cart to pass through it. In Extract Minutes Consultation dated 1st October 1856, No. 1782, the Chief Engineer was requested to call for a full report on the Perambady pass and road, with an estimate of the works necessary to make it passable throughout the monsoon.

5. In his letter dated 24th October 1856, the Chief Engineer stated that he had received intimation from the Quarter Master General's Department, that the 11th Regiment N. I. would descend the Ghaut about the end of December, and that the 20th Regiment N. I. would ascend it in January; and pending the preparation of an estimate in detail, he solicited sanction for an emergent expenditure of Rupees 8,000 which was accordingly authorized in Extract Minutes Consultation dated 12th November 1856.

6. With his letter dated 3rd November 1856, the Chief Engineer submitted a report from Captain Francis, under whom the Perambady road was originally constructed. This officer expressed his surprize at the unfavorable report made by Captain Ludlow on the line, but nevertheless observed that it would be necessary eventually to metal the whole road lying under the influence of the western monsoon, for which purpose a grant of 40,000 Rupees it was stated, would be required, besides an additional sum for gravelling some parts. He also added that the maintenance allowance should be augmented from 100 to 200 Rupees a mile for the jungle stages, a distance of 24 miles. The Chief Engineer having however reported that Captain Ouchterlony would be requested to obtain and forward returns of the traffic on the ghaut and road, and to regulate the annual repair allowance, the Government determined to await the report called for from that Officer as well as the estimate for putting the road in order.

Ex. Mins. Cons. 19th November 1856, No. 2177.

7. With his Proceedings first recorded at the head of this order, the Chief Engineer submits a report from Major Lawford on the present condition of the Perambady pass; Major Lawford states that the road is not metalled, and is impassable during the rainy season, and on the whole, he pronounces the state of the pass to be very unsatisfactory. He considers that not less than 1,500 Rupees a mile, or about one Lac of Rupees for the whole distance of 68 miles, should be laid out on the road in the next five years. He also observes that, out of Rupees 8,000* which was sanctioned by Government, on 12th November 1856, on emergency, for metalling and gravelling the ghaut, only a sum of Rupees 2,047 has been expended, and that too, in a very doubtful manner. It is evident from Major Lawford's letter, that there was no control whatever over the Overseers employed on the road, and that much of the money spent has in consequence been wasted.

* Incorrectly stated as 12,700 Rupees and as sanctioned in December 1856.

8. The Right Honorable the Governor in Council cannot but feel surprized that, with an outlay of nearly 2,35,000 Rupees since 1848, the Perambady ghaut and road should be in the condition described by Major Lawford. It is obvious how inefficient a supervision must have been hitherto exercised over the work. The Government must have now a clear explanation before them as to what has been done with the sum of 11,000 Rupees sanctioned on 2nd December 1853 for metalling the road and with that part of the 8,000 Rupees sanctioned in November 1856, which has been already expended, and in what manner the maintenance allowance of 100 Rupees a mile has been expended. A sketch map should also be submitted showing what portions of the road have been metalled, and what require to be metalled, with an estimate of the actual outlay that will be necessary to put the road into an efficient state.

9. Major Lawford proposes as a necessary measure to build two Traveller's Bungalows at certain places, as also some native choultries and Soldiers' sheds. Some wells are also stated to be required at certain spots to afford a supply of drinking water during the hot weather. The Superintending Engineer says that the expense could be easily recovered by means of a toll at the frontier. The Government observe that the general question of levying tolls is still under their consideration; and that the improvements suggested by Major Lawford must be deferred until an opportunity more favorable than the present shall present itself.

10. In para. 5, Major Lawford says that he is aware, though he cannot refer to the documents, that it has been determined to transfer the charge of the Perambady ghaut to the Public Works Department in Mysore; and that he has forwarded to the Chief Engineer of that Territory a Statement of the Balance available for metalling. He adds that he requested Lieutenant Bean to place that amount, and a moiety of the maintenance allowance, (Rupees 3,400) at Colonel Green's disposal. The Government can find no orders in which an intention to make any such transfer as mentioned by Major Lawford is referred to. In para. 21 of their letter of the 22nd December 1845, the late Board of Public Works, when submitting the estimate for the Perambady Ghaut, observed that the estimated amount chargeable to Mysore was Rupees 17,000; but there is nothing in the papers before Government to shew that the sum in question was recovered from the Mysore Government. The Chief Engineer is requested to ascertain and report the expenditure incurred on that part of the road and ghaut, which is situated in Coorg and Mysore; and whether the amount so expended has been made good by the Government of those Territories. Major Lawford states that Mysore and Coorg have contributed nothing to the cost of the Perambady ghaut, while they have derived great advantage from

it. The Government are of opinion that the cost of such portion of the road and ghaut as is situated in Coorg and Mysore should be borne by the Mysore Government, both as regards original construction and maintenance; and on the receipt of the information now called for from the Chief Engineer, it is the intention of the Government to address the Commissioner of Mysore on the subject; and till then, the transfer of the ghaut to the Chief Engineer of Mysore together with certain available sums, will remain in force. When the subject may be finally disposed of, it will be decided by whom the road should be annually inspected and reported upon.

11. With the second letter above recorded, the Chief Engineer submits, with reference to the Extract from the Minutes of Consultation dated 12th November 1856, No. 2111, an estimate for the repair of the Perambady ghaut amounting to Rupees 12,700. In part of this a sum of Rupees 8,000 was already authorized on the representation of the Chief Engineer, as stated in Para. 5 of this order; and the remainder Rupees 4,700 is now sanctioned; and the charge will be met out of the funds allowed for repairs.

(Signed) H. FORBES,
Acting Secretary to Government.

No. 1145

Extract from the Proceedings of the Chief Engineer in the Department of Public Works. Fort St. George.

Under date the 12th June 1857

Read the following letter

No. 118.

Superintending Engr. Office
Southern Circle, Camp Mysore
3rd June 1857.

From

Major E. Lawford
Supg Engr. Southern Circle

To

Colonel C. P. Taber
Chief Engr. &c. &c.
Fort St. George

No. 145

Sir,

It is perhaps fortunate for the public service however inconvenient to myself, that the South West Monsoon has this year set in so early, as to expose me to a considerable degree of its force, on the march from Cannanore to Mysore, and thus to realize to my mind the obstruction during this season, of all (except emergent) communication across the Peninsula by Ghaut Road No. 6. Situated Cannanore is almost as much cut off from

to bear any heavy traffic in wet weather and requires metalling, and the same remark applies to the seven miles from Durooth to the frontier of Coorg a stony river, a mountain torrent crossed by a trifle bridge of boats from which the ascent of the Ghaut begins.—

3. This magnificent pass has, I doubt not, been too fully and often described to need more than the expression of my admiration. It connects the name of Francis with one of the greatest improvements in Southern India, and only needs durability and permanent efficiency to render it perfect. The road however is not metalled, and the soil is of that description which at one season is pulverized to a degree that renders it extremely heavy and in the rains becomes all but impassable from mud. Between these extremes there are but few days in which the surface is really good, and on the whole the state of the pass must be pronounced very unsatisfactory.—

4. An estimate amounting to Rupees 12,000 for metalling and gravelling the Ghaut, including five miles of road, has been recently sanctioned, (December 1860) but up to this time only a sum of 2042-11 has

has been expended and that in a very dubious manner. The Overseers employed have during the past two years in keeping the Ghaut in repair on the annual allowance of 600 Rs per mile have unavoidably been left almost unemployed, and it is to be feared that much money has been wasted, if not worse. Overseers Church and Dryedale have both died from the effects of intemperance, and the repairs have for some time been entirely in the hands of a Native Writer on 20 Rupees a month, who is placed in circumstances of temptation which are most unfavorable. Accordingly I find this man has allowed the Contractors for Metal to use River shingle or pebbles instead of broken stone, which, I need not say must be entirely removed.

5. I am aware, though I cannot refer to the documents, that it has been determined to transfer the Charge of the Ghaut to the P.W.D. in Mysore, and I have accordingly forwarded to the Chief Engineer of that Territory a Statement of the balance now available for Metalling and requested Lieut. Brain to place

* Letter of 30th June 67 No 1145. Do of 30th June 67 No 1146

place that amount and a moiety of the maintenance allowance / Rupees 3400 / at Colonel Greene's disposal. With these sums and under the greater facilities enjoyed by the local Executive Officer it is hoped the Ghaut may be much improved in a few months while the District Engineer of Malabar will be easily able to attend to the works required within the limits of that Province.

6. But I would not lead the Government to suppose that the outlay is more than a fraction of what is required to place the Road in proper Condition for keeping the traffic open all the year round. The estimate is inadequate for efficiency over the distance it provides for, and I consider that not less than 1,500 Rupees a mile per 68 miles or about one Lac of Rupees should be laid out on this road in the next five years. This Calculation, though general, is not mere guess work as it allows about 1,500 Cubic yards of broken stone at one Rupee per yard per mile.

7. It is also necessary to build two additional Travellers bungalows between Cannanore / Vizak.

at Chavacherry and Coorg a distance of 30 miles which cannot be made in less than three marches in the rains.-

8. Wells are required at the Stony river and at Gunoth, Seety and Chavacherry in order to afford a supply of drinking water during the hot weather when that from the rivers is most unwholesome.

9. Native Artificers and Soldiers sheds are essential from the Stony river to Coorg there being at present only one at Gunoth, while the Mysore Government provide one at each stage where there is a bungalow. Stabling and Cattle sheds are equally necessary for no animals can bear the monsoon.-

10. Were the above works carried out, the communication between Mysore and Cannanore would be uninterrupted throughout the year, and the expense could be easily recovered by means of a toll at the frontier. Mysore and Coorg have contributed nothing to the cost of the Perambady Ghaut while they have derived great advantage from it which would be largely increased if the road were permanently open. To a reorganisation in the

the shape of toll levied on all classes, except foot passengers, none could object nor would the import be felt, except beneficially in the Cannanore market which is now virtually closed for three months.-

11 I have now endeavoured to lay before you, for the information of Government a faithful picture of the actual state of this great communication between the Eastern and Western Coasts, of the political and Commercial value of which it is not necessary to speak, and which no Railway will ever supersede, and I shall accordingly regret if any opportune experience of its difficulties shall lead to timely and vigorous efforts for its improvement.-

12. I ought to state that Captain Francis particularly drew my attention to the importance of including this road in any route either to or from Malabar.-

13 There is one point in the future arrangement connected with this road which it may be as well for me to notice. The Madras Government should I conceive, have some means of ensuring the proper Conservancy of the line which is to be placed under Officers not

responsible

responsible to them, but the whole Cost of which is to be defrayed out of the Revenue of this Presidency. As a Military Road perhaps the best way would be to require its annual inspection by an Officer of the Quarter Master Genl's Department whose Report being laid before Government could be furnished by the Commissioner in Mysore. This inspection should be made during or immediately after the Monsoon.—

Supdt Surveyor's Office
Circle Camp
Mysore 3d June 69

I have the honor to be
Sir
Your Obt Servt
J. D. Lawford
Supg Engr S. Circle

Resolved that the foregoing very important Report from the Superintending Engineer Southern Circle of the present condition of the Perambady Pass be immediately forwarded for the information of Government, and with the recommendation of the Chief Engineer that whilst the Execution of so leading a Communication is very properly in the hands of the Mysore Govt

Government, the periodical examination suggested by Major Lawford, and reported to be continued with the District Engineer of Malabar, whose professional inspection, if communicated to the Commissioner in Mysore, would probably be more satisfactory than any other.—

W

True Extract

Chief Engr

To
The Secy to Government
P.W.D.

Comps Office

Central Office of Pb.
Fort St. George 5th Sept. 1857.

No. 2618.

From The Chief Engineer

To The Secretary to Government Pb.

Public

Repair of the Vrambady Chank

† No. 1782 of 11th Oct. 1856
† No. 2111 of 12th Nov. 1856

Sir,

With reference to the order quoted in the Margin, I have the honor to bring to the notice of Government that an estimate for the Repair of the Vrambady Chank amounting to Rupees 12700 was received in this Office, and having been sent up for sanction on the 17th December 1856, was returned by Government with P. Mines: Cons: No. dated 3rd January 1857, - but the Repairs of the Chank have been going forward under the Grant of 2,000 Rupees sanctioned on the 12th November 1856.

2. The estimate herewith resubmitted was drawn up by the late Acting Head Assistant Collector, and is accompanied by a Report detailing the necessity and nature of the

Public Works Dept. Despatch
Public Consultation dated 12th
No. 1249
Received from the
Chief Engineer
Fort St. George
Read Sept. 1857.

Madras 12th June 1857.
Received 18th
No. 1145

Public Works Dept. Despatch
Public Consultation dated 29th
No. 1249
Received from the Chief Engineer
Fort St. George
Read Sept. 1857.

No. 36.

Copy in early Oct. 8
to Sec. to Govt. Pb. 3rd Oct. 1857
Recd. 4-

Copy of the Letter from the Secretary to Government, Public Department, No. 1249, dated 29th June 1857, forwarding for the information of the Chief Engineer a Copy of a Letter from the Secretary to the Board of Revenue, No. 1145, dated 12th June 1857, with its enclosure, on the subject of the Repairs of the Vrambady Chank.

Public Department, 29th June 1857.

To The Secretary to the Board of Revenue.

Sir,

I am directed by the Vice President in Council to forward for the information of the Chief Engineer a Copy of your Letter No. 1145, dated 12th instant, with its enclosure, on the subject of the Repairs of the Vrambady Chank.

I have the honor to be,
Sir,
Your most obedient Servant,
(Signed) J. Thomas
Secy. to Govt.

C21 Dup. to Pbs.

the work, as well as the difficulties of the communication. The Government have now before them a Report on this Ghaut by Major Lawford fully Corroborative of all Mr Pickle's views and Statements, but expressing his opinion that the future outlay to place the Communications in good order must be much more considerable.-

3. With such strong recommendations of vigorous and effective operations recorded by Officers familiar with the locality, it cannot be necessary for me to do more than state my full concurrence in their proposals, and I would suggest that immediate sanction be given to the full amount of Mr Pickle's estimate 12,700 Rupees including the 2000 Rupees already Conditionally authorized.-

4. But as the Ghaut itself is situated in Coorg, and much difficulty has been experienced in Carrying on the Repairs by the Officers of Malabar arrangements have been made for placing this part of the Road under the Chief Engineer of Mysore by whose Department all future works may be executed, and the Madras Government should be furnished with periodical Reports of the State and Requirements of the Communication.-

5. As a Military Road of first rate importance, the Perambaddy Ghaut cannot be neglected with impunity, and its Repair to the full extent of the present estimate should be carried into effect between September and February next after which the jungle becomes too unhealthy for such operations.-

I have the honor to be
Sir,
Your most obedient
Servant
Lt Colonel
Chief Engr

Central Office of P.W.
Fort St George 3rd Sept 1857

To
The Secretary to Government
&c &c

Comp 85

Public Roads — New Work

Abstract of Estimate No. — of 185 .5

Road No. 14

District. Malabar

Work. Metalling & repairing Trunk Road No. 14 from the 32nd Mile Stone in Malabar to the 47th Mile Stone in Coorg.

Quantities	Description of Work	Rate Rupees	Rate Annas	Rate P.	Amount Rupees	Amount for each part
C. Yds.						
1537½	Metalling with broken granite Ky.	"	12	"	11529	
5823½	Do. with Laterite gravel Do.	"	2	"	728	12257
	Tools and Sundries					263
2	Mistries for 6 months	10	"	"	"	120
2	Coolies for Do.	5	"	"	"	60
					Total Company's Rupees	12700

Central Office 1st March 1857

Geo. Taber Colonel
Chief Engineer P.W.D.

Public Works Department
Road No. 14
Estimate for 1857

Estimate of Rs. 12700 Company's Rupees.

Abstract dated 1st March 1857

Recommended for Sanction
Rs. 12700 Company's Rupees.

Chief Engineer

Estimate for the Repair of the Trunk Road No. 14 and Maintenance for 2 years.

Recommended for sanction.

Rs. 12700 Company's Rupees.

Chief Engineer

1857.

C 21 Chief Engineer's Office

Number of Lot	Description of Stock	Price	Amount	Amount received by each party
		£ s. d.	Dollars	Dollars

Copy in no 4 L to C
8/3d. Feb. 1859 No 1
Para 4.

Colombo

Sir

The Chief Engineer
&c &c &c

Sir

The Secretary to Govt
&c &c &c

Public Works Dept

1

4th 1856

Extract from the Minutes of Consultation

Under date the 29th August 1857.

Read the following

Letter

Extract from the Report of the
Board of Revenue

dated 12th June 1857 No 1157

From the Chief Engineer

dated 3rd August 1857

The Board proceed to consider
above report, two letters
Dyvore canal Alakolaar,
being referred on Friends
road &c. &c. running
from Caravanpo to the
Dyvore frontier a
distance of 68 miles.
For the formation of
this

2

Public Works Dept

4th 1856

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Read the following

Letter

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Public Works Dept

Report 3/8/57
No 1157/57

Estimated Estimate for metalling
Repairing Trunk Road 16th from
the 32nd mile Stone on Alakolaar to the
47th mile Stone on Coast at the Dutch
of Alakolaar -
Amounting to Cash Rs. 12700 -

their head an Estimate
amounting to Rupees
2,00,376 was first sanctioned
by the Honorable Court of
Directors on the 3rd November
1847; and the Date of Receipt
of Public Works, in which
a building Track Estimate,
stated in their Letter of
the 23rd December 1846, that
it proceeded throughout
for a period of three years
Cafe, and that all the
Streams, except the Scilly
Cacharoo, were to be bridged.
From this report it might
have been assumed that pro-
-vision had been made for
metalling the road, but a
reference to the Estimate shews
that that was not the case. The
Work appears to have
been commenced in
Feb 49

Vide Para 3 Ft Wm Govt
14th January 1848 & 215.

February 1848, and completed
in April 1853. The
amount expended was
Rupees 2,00,385-6-4 which
only
exceeds by Rupees 9-6-4
the authorized Estimate
for construction, and
for annual Repairs
to the close of 1852/53.
The Executive Govt
stated 14th October 1853
No 389, "recommended
& expressed their satis-
faction at the Work
having been done within
the Estimate, and
observed, that it was highly
creditable to Lieutenant
Francis. It was
understood that all the
Work provided for in
the Estimate, was
performed

performed, with the excep-
-tion of one Summer, which
was to be built, from
the amount realized
by the sale of Timber
and underwood cut
down.

2. On 25th October 1853
the late Superintendent
of Roads, Captain Law-
-son, forwarded an
Extract from the Diary
of Captain Lindsay
the then Acting Civil
Engineer of the 7th Dr.
for June 1853, report-
-ing on the Construc-
-tion of the Brom-
-bady Grant and
roads. The roads were
stated not to be in
the good order in which
they

have been, and certain
defects were pointed
out, the chief being
the want of
metalling. Captain
Lawson accordingly
submitted Estimates
for metalling and
other works, amounting
to Rupees 13,131-7-10
as follows.

For metalling and draining certain portions of the Road	11,024-10-11
Carried	
For constructing a Bridge of 3 Arches of 10 feet Span each	770-4-9
Do — 3 of 15 — do — do	1,334-8-2
Do Truss Bridge across the Coastie Toda	1,395-10--
	14,529-12-10
Deduct amount sanctioned in January Consultation 27th January 1853 for a Masonry Bridge over the Coastie Toda	1,398-5--
	13,131-7-10

Toda

3 On the 19th August 1854 the Government sanctioned on the representation of Captain Johnston an Estimate for the construction of a Bridge over the Sutlej river, amounting to Rupees 29023-5-9. It was proposed that a toll should be levied on the Bridge, but the Government observed that the question would come under consideration when the collection was able to report that the Bridge was nearly completed, and was about to be opened for traffic. From papers subsequently laid before Government, they however learn that this Bridge has not been built in consequence of some objection to the site originally proposed; and the Chief Engineer's letter of 9th August 1854, containing his opinion on the subject, has been separately disposed of in the

Extract

We also recommended that the annual maintenance allowance of 3100 Rupees formerly sanctioned, should be raised to 6800, or from the rate of 50 to 100 Rupees a mile. The Government in Extract Mins Cons. dated 2d December 1853 No 426, expressed their dissatisfaction at the state of the road and Bund, as reported by Captain Ludlow; and, after recording certain observations, sanctioned the sums applied for, and also raised the annual maintenance allowance to Rupees 6,800.-

An

Extract Minute Consultation

of

4th Thus the aggregate Conse=
=tion on the Paramboody Ghaut
and road, inclusive of contin=
=tingencies allowance, and exclusive
of the sum sanctioned for the Brid
Bridge, amounts to about Rupees
235,000, or Rupees 3,256 a mile.
From a letter addressed by Capt.
Colston Asst Assistant Commissary
General to Colonel Mackay Com=
=missary General Madras, under
date 29th August 1856, the Govt
learnt that, notwithstanding the
large outlay of Rupees 235,000,
a portion of the road between
Coimbatore and the top of the
Paramboody Pass was in a very
bad state, and the injurious Conse=
=quences to the Ryots in Coimbatore
and to the general well being of the in=
=habitants and the neighbourhood, owing
to want of proper Communication,
were then prominently brought
to notice. It was reported on that

occasion

33

that the depth of mud
in some places was nearly
two feet, and that it
was of such a tenacious
clayey description as
to render it totally impo=
=ssible for a Carriage
cart to pass through
it. In October 1856,
Lieut Colonel Chase
Commanding Officer
was requested to call
for a full report on
the Paramboody Pass
and road, with an
estimate of the works
necessary to make it
passable throughout
the Monsoon.

5th In October 1856 the Chief
Engineer stated that
he had received no intima=
=tion from the Quarter Master
Generals

General Department
that the 11th Regt. N.S.
would proceed from the Ghaut
about the end of Dec-
-ember, and that the
20 Regt. N.I. would
proceed at in January,
and pending the pre-
-paration of an estimate
in detail, he solicited
sanction for an imme-
-diate expenditure of
Sterling £1000, which was
accordingly authorized
in Ex. Ord. Com. dated
12th November 1836.

6. With his letter
dated 3d November 1836,
the Chief Engineer sub-
-mitted a report from
Captain Francis, un-
-der whom the Travancore
road was originally
constructed. The Officer
expressed

expressed his surprise
at the unfavorable
report made by Cap-
-tain Ludlow of the line,
nevertheless
but observed that it
would be necessary
eventually to make the
road practicable for guns under
the existence of the
western clearance, for
which purpose a grant
of Sterling £1000 Rs. 10,000 would be required,
besides an additional
sum for gravelling some
parts. He also added
that the maintenance
allowance should be
augmented from 100
to 200 Rs a mile for
the jungle stages, a
distance of 24 miles.
The Chief Engineer
however reported

Chief

That Captain Cuthbertson would be requested to obtain and forward returns of the traffic on the Island and roads & to regulate the annual repair thereof, the Governor determined to give an account of the report called for from Captain Cuthbertson, as well as the Estimate for putting the roads into order.

With his Proceedings first recorded at the head of this order, the Chief Secretary submits a report from Major Lumsford on the present condition of the Peninsula & Major

Ent'd C. 19 Jan'y 56 & 2177

Lumsford states that the roads are not metalled, and are impassable during the rainy season, and on the whole, the former exceeds the state of the same to the very considerably - the latter less than 500 Rupees a mile, & about one fifth of Rupees for the whole estimated at 68 miles, should be laid out on the roads in the next five years. He also observes that, out of Rupees 5000 which was sanctioned by Govt on 12 November 1856 as emergency, for metalling and gravelling the Causeway & town

* increased, stated as 1270 Rupees and reverted to 1256.

vent of Slaves 20th
have been expended
and that too
very doubtful regard
Shewed that
allege Sandford & Ellis
that there was no con-
-tract to haul over
the Excavation employ-
-ed on the road and
that meeth[e] proving
has no consequence and
been so answered.

8 The Right
Honorable the Governor
in Council cannot but
feel surprized that
until and on May January
£35,000 Rix[d] Dollars 1848,
the Peramboor Ghaut
and road should be in
the condition described
by Major Sandford - &
no steps have been taken

X and at the third page of the 8th
Paragraph of the [illegible] 1848
which has been altered by the
words [illegible] the
more than one thousand pounds of
the Paper currency has been
expended -

a Supervision must have
been held there to prevent
over the north. The Gaut
must have run a clear
explanation before
them as to what has
been done on the Estimate
of 11,000 Rix[d] Dollars for
2nd December 1848 for
metalling the road. X
A sketch map should
also be submitted showing
what portion of the
road have been
metalled, and what
required to be metalled,
with an estimate of
the actual outlay that
will be necessary to
put the road into
an efficient state.
Major Sandford
proposes no unnecessary
measure

...ive award to the Collector
traveller's Bungalow at
certain places as also
some Boat Houses Chauthies
and Peleheers' sheds
Some such are also
stated to be required
at certain spots to
afford a supply of
drinking water during
the hot weather
The Superintending
Engineer says that the
expense could be
easily recovered by
means of a toll at the
frontier. The Govt
observed that the general
question of levying
toll
is still under their con-
sideration and that the
improvements suggested by
Major Comford must be con-
sidered until an opportunity
more favorable than the
present shall present itself.

See Para 5 Major
Comford says that he is
aware, tho' he cannot refer
to the documents, that it has
been determined to trans-
fer the charge of the Perum-
boody Lehaut to the Public
Works Department in Mysore
and that he has forwarded
to the Chief Engineer of that
Territory a Statement of the
Pulonee available for metalling
He adds that he requests to know
Para to whence that amount
and

and an moiety of the Peninsular allowance (Rupees 2,400) acts Colonel Greene's decision the Government can find no order in which an intention to make any such transfer as mentioned by Major Comfort is referred to. In Para 21 of their letter of the 22nd December 1845 the late Board of Public Works when submitting the Estimate for the Perumbody Ghaut observed that the estimated amount chargeable to Mysore was Rupees 17,000. but there is nothing in the papers before Government to shew that the sum in question was recovered from the Mysore Government. The Chief Engineer is requested to

to mention and report to Government the expenditure incurred on that part of the road and Ghaut, which is situated in Coorg and Mysore, and whether the amount so expended has been made good by the Government of those Territories. Major Comfort did not think Mysore and Coorg had contributed nothing to the cost of the Perumbody Ghaut, while they have derived great advantage from it. His Govt are of opinion that the cost of such portion of the road and Ghaut as is situated in Coorg and Mysore should be borne by the Mysore Govt both as regards original construction and maintenance, and on the receipt of the information now called for from the Chief Engineer, it is the intention

intention of the Government
to address the Commissioner
of Mysore on the subject;
and till then, the transfer
of the Ghaut to the Chief
Engineer of Mysore together
with certain available stores
will remain in force; when
the subject may be finally
disposed of, it will be decided
by whom the road should
be annually inspected &
reported upon.

11 With the second letter
above recorded, the Chief Engr.
submits, with reference to the
Extract from the Minutes of Con-
sultation dated 12th November
1856 No 2111, an Estimate for
the repair of the Perambody
Ghaut amounting to Rupees
12700. In part of this a sum
of Rupees 8000 was already
authorized on the representation
of the Chief Engineer, as
stated in Para 5 of this order,
and the remainder Rupees 4700
is now sanctioned, and the
charge will be met out of
the funds allowed for repairs.

9 Copies to the Chief Engr
Mysore

Chief Secy Dept. &c

Copy in a G. L to C.
of 3d Nov. 1859 No 1
Para 4

Lt. Col. Yorke 1857 Dft.
Do to Command Dft.

Fo 1656.

Asst. Surv. Genl.

Dft 29th Augt 57.

From Chief Engr 15th Octr 57.
No 2046 in C.E.

From Do of 12th April 59 & Encl
Cancel 10 Lines 32@34

From Do 28 Feby & Encl 3041
in C.

Proceedings of Committee assembled at [illegible] on the 20th day of May 1857 for the purpose of examining the Roads of the Peninsula of Gibraltar and the Ground adjacent thereto with a view to the formation of a Road from Europa Point to Queen's Lines and the Rock Gun Battery.

Estimate for the Road from Europa Point to Queen's Lines amounting to £12,700.

Fo 36 at 38.

c 21 Augt 1860