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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

Con. 7-7-57

G.O. No. 1380 Press Mis.

51 52

Dated 7—7— 18 57

Not to be folded or roughly handled

Fort Saint George, Public Works Consultation of 7th July 1857.

No. 51. Read the following letter from Colonel C. E. FABER, Chief Engineer; to H. FORBES, Esq., Acting Secretary to Government, dated 6th June 1857, No. 981.

Sir,

I have the honor to forward, for the information and orders of Government the accompanying copy of a letter from the Superintending Engineer of the Southern Circle, on the subject of the improvement of the Tambercherry Pass and Wynaad roads, No. 133, dated 21st May 1857, together with two Memoranda on the same subject prepared one by the Acting Collector of Malabar, and the other by Mr. John Wells, a Coffee Planter.

2. I have the honor, before submitting a detailed scheme, to request that I may be informed if Major Lawford's propositions are approved of, and if it is the wish of Government that the suggestion to raise a body of coolies on regular monthly pay shall be carried into effect.

3. It is essential that this last question be considered and decided upon, as Major Lawford has justly implied that this step must be taken if the improvements, so much required in the Wynaad Talook of the Malabar District, are to be economically and systematically carried into effect.

Fort Saint George, Public Works Consultation of 7th July 1857.

~~No. 51. Read the following~~ letter from Major E. LAWFORD, Superintending Engineer Southern Circle ; to Colonel C. E. FABER, Chief Engineer, dated Camp Cannanore, Malabar District, 21st May 1857, No. 133.

SIR,

During my stay at Calicut, Mr. Robinson brought so forcibly to my notice the necessity of undertaking, at an early date, some works for opening the communications with and through the Wynaad Talook, that I felt it incumbent on me to see so much of that part of the District as might enable me to lay some feasible plan before Government, with reference to their order calling for an estimate for improving the Tambercherry ghaut, which Lieutenant Bean kindly communicated to me. Mr. Robinson also drew up a few notes of his own views, copy of which is annexed, and gave me every facility in his power for obtaining further information from the coffee planters, one of whom (Mr. Wells) has also favored me with a memorandum on the subject.

2. I proceeded from Calicut by the Tambercherry pass to Luckady cotta, visited several estates, and met some of the principal planters ; thence I rode by Culpetta to Manantoddy, and descended the Pera ghaut to Tellicherry. I could not attempt any close examination of the ground, but I saw very clearly the extraordinary difficulties of the Tambercherry pass, and was a witness of the great sufferings of pack bullocks, of which I am assured hundreds die annually on the road, and this I can easily believe, for the upper part of the ghaut is so steep and rocky that on the least check or slip a bullock falls, and those behind are immediately thrown down and not unfrequently fall over the precipice.

3. This ghaut was partially examined by Captain Francis in January 1856, without any successful result, for the line afterwards surveyed and estimated by Mr. Williams was so full of zigzags as to be unfit for cart traffic at its fixed slope of 1 in 20. It has however appeared to me possible to adopt a better trace by commencing the slope further to the south, and following one of the spurs which extend nearly to Tambercherry, thus winding round the valley to the rocky ridge which crowns it ; this however is mere cenjecture, and it is sufficiently clear that nothing but a careful examination can lead to a practicable trace being effected.

4. In their order on the subject, the Government have directed that a complete survey and estimate should be submitted, but it has been overlooked, that no such documents can be prepared until the trace is first made through the densely wooded, and precipitous hills, and that a grant of money is absolutely necessary for effecting this object. Moreover it will demand the exclusive attention of an Officer for a considerable period during the healthy season, or from the month of September till February, for at no other time of year could these jungles be safely explored. Thus it is evident that Lieutenant Bean has not at his disposal the means of complying with the instructions he has received, and it will be my object to shew the nature and extent of the assistance he requires for fulfilling the intentions of Government.

5. The roads in Wynaad are almost entirely unformed, and the hilly nature of the country renders it necessary that all should be correctly traced. The soil indeed is excellent, and in cases where (as on the line from Manantoddy towards the Peria ghaut) the surface is tolerably level, an excellent road is easily formed. But in general new surveys and traces are indispensably necessary, or, as is shewn by Captain Francis, great errors may be made and much money be wasted in forming bad lines.

6. I am therefore decidedly of opinion that an Officer should be expressly appointed as Executive Engineer in Wynaad, and that his whole attention should be directed to the tracing and construction of the Tambercherry Ghaut in the first place, and the roads across the Talook afterwards ; the works should be commenced about September next, and a sum of not less than 10,000 Rupees held available for the purpose. No detailed surveys or estimates can be prepared without this preliminary outlay as it is impossible to measure accurately the work required until the lines are distinctly and permanently cleared.

7. Bridges are urgently wanted over many streams in the Talook which run with great velocity in deep channels during the S. W. monsoons, and are crossed with danger and difficulty by bamboo rafts but bridges should not be built till the roads are surveyed.

8. The Planters mention to me that since the construction of the Perambady Ghaut the old road between Mysore and Manantoddy has been entirely neglected. Notwithstanding it is bridged and otherwise a good line; although this no longer forms the great Military and general route between Mysore and Malabar, it is still a very useful line for Wynaad, and the authorities in Mysore should be requested to keep it in passable order, which I believe can be done at trifling cost. The principal supply of labor for the plantations comes from Mysore, and there can be little doubt that were the communication between the two provinces easy the traffic would be greatly increased.

9. Little remains for me to say in support of the strong recommendation of Mr. Robinson that energetic measures should be adopted for improving this beautiful tract of country, which covering 1,100 square miles, produces a revenue not exceeding 40,000 Rupees including export duty on Coffee, or about 36 Rupees per square mile; but which affords one of the most promising openings for European enterprize in all India; and as the best and most productive estates are those on which a liberal though judicious outlay is bestowed, so it is essential to the prosperity of Wynaad that its external roads and its mountain passes should be opened as rapidly as circumstances permit. The Government should bear in mind that seasons will not be controlled by rule, and that sickness and death will certainly follow all untimely efforts to clear the forests of Wynaad.

10. Supposing that sanction is now given for the expenditure of 10,000 Rupees in cutting a bullock path and making a survey and detailed estimate of a first class road, the work could not be begun till September, and would certainly not be finished before the middle or end of December, so that there is no prospect of the papers being laid before Government in time for entry in the Budget of 1858-59 and thus nothing can be effectually undertaken till September 1859-60; and allowing two years for completion, the Tambercherry Pass cannot, under existing rules, be opened for carts till 1861, or four years from this time.

11. I have entered into this calculation in order to shew distinctly the effect of the present system, and to prevent any undue expectations being formed of an early result of the recent orders of Government; but there are other circumstances tending to delay the opening of Wynaad which must not be lost sight of. The difficulty of obtaining labour is greatly felt by the Planters, and must be a still more serious obstruction to any extensive engineering operations, which I see no way of overcoming so likely to be effectual, as the formation of a body of Pioneers or Public Works Corps, such as exists in Ceylon, and by which all the great improvements there have been executed. If a body of 300 men were raised under an efficient Officer, and employed after the present monsoon in cutting a trace up the Tambercherry valley which might be finished by February next, they could during the hot and sickly season, carry on the road improvements in the open country, returning again to the Ghaut in September 1858, and thus the works might be progressively carried on without any heavy present outlay.

12. I have consulted many persons on this subject and find an unanimity of opinion that satisfies me, the project is not only feasible, but the most easy of accomplishment of any. The Planters, some of whom have seen the system worked in Ceylon, assured me that it was practicable and economical. Mr. Robinson expressed a similar opinion and Mr. Chatfield who was Sub Collector of Malabar during the construction of the Perambaddy Ghaut, informed me that forced labor had been employed in that work which could not have been otherwise completed, but that is of course now out of the question, and he seemed to think a permanent Corps of coolies the best substitute, as it would be difficult to keep others regularly occupied on such distasteful labor.

13. The above remarks were written before my arrival at Cannanore, where I have found a Detachment of about 50 Sappers and Miners employed in repairing the fort; but having ascertained from Captain Keating, the Executive Officer, that their services can well be spared, I would strongly recommend that they should be sent to Wynaad, and if possible increased to the strength of a Company. With these men and a permanent body of coolies the Wynaad roads could soon be brought into an efficient condition by an energetic and intelligent Officer, and this seems to me the only feasible way of effecting any early improvement.

14. An intelligent Officer in command of a Company of Sappers, and with power to expend 10,000 Rupees in opening the Tambercherry Ghaut, and other lines of road in Wynaad, could, under proper superintendence, effect a great deal of improvement in six months, and could submit these detailed plans and estimates which Government require, without any interference with the other works of the District, but it is necessary that the Sapper Officer should be really qualified for the duty.

No. 52. ORDER THEREON, No. 1300; dated 7th July 1857.

The project of opening up the Wynaad country to the coast, by forming a cart road from Sultan's Battery in central Wynaad, viâ the Tambracherry Ghaut, to the sea port of Calicut, has formed the subject of some correspondence.* It originated in June 1855, in a representation from certain Coffee planters, of the difficulties experienced by them in carrying their produce to the place of shipment, the existing track being only practicable to pack bullocks. This representation having been referred to the Engineer and Revenue Officers, resulted in an estimate of 48,000 Rupees being laid before Government, for the reform of the Tambracherry pass and the improvement of the roads above and below it. From the papers submitted by the Chief Engineer at the time, the Government observed that the reporting Officers held different opinions, as to the means to be provided for carrying the Wynaad produce to the coast; but all agreed that there was absolute necessity for providing such means, in the absence of proper existing communication. Captain Ouchterlony saw so much objection to the reform of the Ghaut and road by the line then selected, both in regard to the expense, and the natural difficulties to be encountered, that he recommended the abandonment of the project, and in lieu, the improvement of the existing pass at an outlay of 4,000 Rupees. To him, it appeared that the Tambracherry would be a minor route, considering on the one side, the facilities offered by the Peria Pass and road from Manantoddy in Upper Wynaad to the Sea port of Tellicherry, and on the other, the prospective grand route to Mysore and to the Neilgherries by the Carcoor Pass. Subsequently, on being informed of the wants of the planters, Captain Ouchterlony acquiesced in the proposal of reforming the Tambracherry Pass; but of the two Passes, he gave the preference to the Carcoor, as the better outlet for the Wynaad country. On the other hand, Mr. Robinson, the Acting Collector of Malabar, strongly advocated the opening of the Tambracherry Ghaut, as it was the most important route to the planting interests of the country. In a later paper, now before Government, Mr. Robinson adheres to this recommendation. He divides the Talook of Wynaad into North, Central and South Wynaad; and to each Division, he assigns a route to the coast, the most direct, relatively to the Division from which it is designed to lead. The Peria and Cootaddy Pass, he says, provides for north Wynaad, which exports Coffee from Tellicherry. South Wynaad exports from Calicut, and requires therefore direct communication to that port; the Carcoor Pass, in Mr. Robinson's opinion, being indisputably the proper Pass for that purpose. The requirements of Central Wynaad, by far the most important in a planting point of view, are those most difficult to be met. For this Division, the Tambracherry Pass is the direct route; but the existing track is so full of natural difficulties, that it is proposed to abandon it, and selecting a more convenient line, to construct a road for wheel carriages.

* Recorded in Cons. 3rd July 1855, Nos. 3- 4.
14th Aug. ,, ,, 37-38.
28th ,, ,, ,, 26-27.
25th Sept. ,, ,, 12-13.
15th April 1856, ,, 8- 9.
10th Feb. 1857, ,, 24-25.

2. The estimate of 48,000 Rupees submitted by the Chief Engineer on the 3rd Dec. last providing for this object, having been avowedly an imperfect one, the Government could not permit its entry in the Budget. They accordingly called* for a more complete report and estimate, with a survey of the Pass. In reply to this requisition, the Chief Engineer now submits a report from Major Lawford, the Superintending Engineer of the Southern Circle, made after personal inspection of the country. He also submits a further memo. from Mr. Robinson, and another drawn up by Mr. Wells, one of the settlers in Central Wynaad. From all these papers, the Government are convinced of the extreme desirableness of opening up this hilly country, fast growing into importance by the enterprize and capital of European settlers; and they are confirmed in their previously

* Extract Minutes of Consultation, 10th February 1857, No. 296.

Public Works 1857 Depart.

Cairn of July

No: 1300

Extract Minute of Cairn

of 7th July 57

From the Chief Engineer S/t.
October 59 Ct. 2598 in Cairn.

No: 514 52

Passing orders on a letter from the Superintending Engineer Southern Circle offering Suggestions for the improvement of the Tambracherry Pass and Wynaad roads.

Memorandum of Mr. W. Nelson

Wynaad is a Talook of 1100 Square miles area. It has a length of about 60 miles from N. W. to S. E. and an average breadth of 25 miles. The country is hilly and rugged, much covered by forest and intersected by Rivers, it is therefore tho' presenting no engineering difficulty, nearly impassable, especially in the monsoon from want of made roads and bridges. The roads such as they are, are in a most imperfect state. Wynaad being a long oblong Talook, may be considered in 3 divisions, North, Central, and South Wynaad. The forest includes those parts about Manantoddy, the Banmagherry Hills, Bimally, Peria, Cootyl, and Ponamarom and Central Wynaad is the part of the province from the Sultans Battery to Calpetta, including Serjeant, Meenmarsom Muslim, Cytheee, Vaethady, &c. South Wynaad comprises Pooduloor, Nambolla Hollah, Nelliyallum and Meralla Hollah.

Each of these parts requires a direct communication with the Sea Coast. The Peryah and Coolyaddy Ghats provide for North Wynaad which exports Coffee from Telly and either or both

the Tambracherry pass and the

both these Passes ought to be improved into
wheel traffic Chaunts. South Wynaad via
Pootoo from Calicut and requires Communi-
-cation with this Port. The Caicor is indis-
-putably the proper Pass for this part
of Wynaad. Chaderani Pass and Kopa
Coil are to require no further notice. —

The requirements of Central
and Sow Wynaad (by far the most
important part in a planting point of
view) are not so easily provided for. Its
absence of exhaustless its produce, Coffee, Pul-
-lachies, Gunny bags and all are limited
over the crags and precipices of the
present Zamboorcherry Pass into the Tam-
-boorcherry valley, but this Country can-
-not. The present Pass must be abon-
-doned and a good Chaunt be sought
I do not admit, like the unsightly rig-
-ging of Mr. Williams' trace up the
Ghats, indeed with such Zigzags, a Chaunt
one in twenty is not really passable to Wheel
Carriages. I doubt therefore greatly whether
this ought to be adopted and the ques-
tion now is, where the Chaunt is to be. No
time is to be lost in searching for a
good line of Chaunt from the Foot

of the Chaunt to Calicut there is an
impassable road, and a Branch road to
the Beypoor River will be the only further
necessary declarations. —

Thro' the Country along the
Chaunt a road must be traced formed
and bridged, from Vaetady or such place
as shall prove to be the most eligible top
of the Chaunt to Manantoddy via Cal-
-petta and Punnamaram (not the most
direct line but that which passes the two
most important and populous Country
with branches to Seyant and Chambra
from Vythee or Kalpetta, and a good
main road from Kalpetta to Sultans
Battery. Another branch road be required
to Coorumbala. Other valuable feeders will
suggest themselves as the invite presents
and might be traced at the time. —

The other roads energently required
for Wynaad are, one from Sultans Battery
to Devil Cottah and Coorumbapoina Kotte-
-allum. One from Sultans Battery
via Nellacottah to Tippoo's road with a
branch direct to Govalore from the
neighbourhood of Noomballah Cottah.
The direct line from Sultan's Battery
to Manantoddy might be post poned.

as

the Zamboorcherry pass and the

as the road from Sultans Battery and Calpetta and Panamaram will be available but a most desirable line remains to be traced from Calpetta or by Vince the Moopanaad and the Country South of the Calpetta Hill range, to Nellallum and Cairoor joining in short the two Ghauts and terminating either of the passes available to the large stretch of important Country which would be opened up by the line.—

Lastly, there remains to be considered the line from the interior of Mysore viâ Wynaad. Wynaad obtains all its Cairi provisions, and supplies of almost every sort from Mysore, and these lines are of vital importance to its well being. With regard to these again, the Talook is divided into 3 districts.—

North Wynaad depending on the Bowally road treated of in the accompanying letter to the Superintendent Asst Commr Dindigul.—

Central Wynaad depending on the Sultans Battery and Calpetta road which ought to be traced

and

and completed on both sides of the Boundary, while South Wynaad emergently requires a good road thro' Gudalore &c. to Nippon Cairoo on the line from Mysore to Cayor.—

This system of Communication would provide that Country with the roads emergently required and it ought at once to be laid out, Road of various degrees of badness exist now in all these lines, it might then be worked out within the next two years, but must likewise do an attention to any remarks on the subject of tracing cross roads in Wynaad appended to the Budget of 1857/58, herewith accompanying. Estimates are springing up in what must become lines of Public roads, and once there are formed, the line of road will cost 1,500 Rupees per mile, if we have to go thro' them.—

A system ought to be adopted for paying by way of grant in aid up to one half of any expenditure

of

of Private Plans sent, or lines likely to prove useful as Public communications.

Signed J. H. Robinson

True Copy

Signed E. Crawford
Sup. Engr. 1st Div. Circle

True Copy

Wm. Sykes Colonel
Chief Engineer

Comp'd [illegible]

Memo:

There are now /10/ ten Estates between the top of the Tambacherry Pass and Cutputty containing 1600 acres of land planted with Coffee.

Three new Estates are being opened, the Jungle having already been felled and burnt for planting this Monsoon: making a total of /13/ Thirteen Estates containing about 1850 acres of planted land; which will be increased during the next season to 2000 acres of planted ground; and by the end of the Monsoon of 1860, it is estimated, that at least 3000 acres of land in that locality will be planted with Coffee.

At present it may be said, that this part of Wynaad is without a road, to bring the produce down to the Coast.

Under such difficulties do the Planters now labor, that although within ten days of the Coast being closed for export for the season; yet part of last Season Crop of Coffee has not yet arrived, in consequence of the difficulty there is in obtaining Bullocks to bring loads down the present Pass:- and with the increased cultivation these difficulties will multiply.

We Remain every Respectfully

Copy in a letter to Lieut Col Douglas dated 31st October 1862.

Enclosure in a letter from the Chief Secy to Govt No 1881 dated 31st October 1862.

Madras Civil Service

Clause 13 Cl.

No 981

1 P.R. 1164/57

Copy of a Memorandum from Lieut B. Robinson on the Line of the Tambacherry Pass and Byanad Road.

The quantity of Coffee from the Estates this season did not exceed 4,000 Cwts:, the Estimate for the year 1858 is about 16,000 Cwts:; with the present roads and Pass, it will be impossible to convey it to the Coast. Not only do the Planters require roads to bring the Coffee down by, but they are equally essential to convey Manure, Shell for Lime, Stores, and other necessary articles up to the Estates; also to convey Rice from the interior for the Coolies on the Estates. A line for a new Pass was traced and surveyed last year; Mr. Robinson informs me that in consequence of the numerous turns in it; that although the ascent does not exceed a rise of one in twenty, that it cannot be made into a Bandy-road: this line is to the north of the present Pass.

I have always been of opinion, that the best line for a road up the Ghaut, is to the Southward of the present Track; there is a spur which commences at the bottom of the Ghaut, and runs round a kind of Bay quite out to the Top of the Ghaut. I pointed this out to Lieutenant Roberts, Engineers, some years since; and he thought highly of it; as did Captain Francis when he examined the Country with a view to having

having a new line of road and Pass: The Surveyor under his orders did partially examine this Line; he commenced a trace from the Top of the present Pass, and he informed me that after going on well for some distance, he came upon a quantity of Sheet rock which induced him to abandon the trace; probably if the trace was commenced at the foot of the Ghaut, (at the spur before named), working upwards, an outlet will be found between two hills on the top of the Ghaut, half a mile to the Southward of the present Pass; and thus avoid all the Sheet rock. I suppose that even if a small quantity was found in the Line, Gunpowder would remove the obstacle.

I believe it has been suggested that the Pass should be at Terriroot; I deem that a Pass at Terriroot would be useless to the Estates between the head of the Tambacherry Pass, and Culputty, as the distance the produce would have to be carried from the /13/ thirteen Estates would, ere it reached Calicut be doubled that is from the top of the Tambacherry

Pass

Pass to Calicut Bungalow, the distance is 30 miles; from the nearest of the Estates to the foot of the Terriot Pass would be about 30 miles, and from thence to Calicut upwards of that distance; making a total by that route of 60 miles; the present line of road from the foot of the Tambacherry Pass to Calicut only requires alterations to make it a good Bandy road.

I may further mention that there are only two Coffee Estates at Terriot and that neighbourhood, whilst there are (13) Thirteen Estates near the Tambacherry Pass, consequently this is the road to benefit the majority of the Planters.

Calicut
8th May 1857.

(Signed) John Wells.

(Signed) C. Lawford.
Supg Engr Southn circle.

(True Copy)

A Cullen Colonel
Chief Engineer.

Copd. HS.

the Tambacherry pass and we can

Copy in a letter to England dated 31st October 1863 No 1107 of 1863.

Enclosure in a letter from Lt. Col. Keir Esquire A.D.C. to Chief Secy. to Govt. Madras.

Dated Ootacamund 7 June 1857.
Recd. 8 June 1857.
No 981

P.W. 1164/57

Copy of a Memorandum by Lieut. Wells, Executive Engineer Cannanore Division, upon the Cardamum Hills.

No. 133.

Superintending Engr. Office
Southern Circle
Camp Cannanore Malabar
District 21st May 1857

From Major E. Crawford
Superintending Engr. S. Circle

To Colonel C. E. Faber
Chief Engineer & Secretary
Fort Saint George

Sir,

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the coffee Planters, one of whom (Mr Wells) has also favored me with a memorandum on the subject.

2. I proceeded from Calicut by the Tamberchery Pass to Puckady Cotta, visited several estates, and met some of the principal Planters; thence I rode by Coolsetta to Monamboddy, and descended the Pera Ghaut to Tellicherry. I could not attempt any close examination of the ground, but I saw very clearly the extraordinary difficulties of the Tamberchery Pass, and was a witness of the great sufferings of pack bullocks, of which I am assured hundreds die annually on the road, and this I can easily believe, for the upper part of the Ghaut is so steep and rocky that on the least check or slip a bullock falls, and those behind are immediately thrown down and not unfrequently fall over the precipice.-

3. This Ghaut was partially examined by Captain Francis in January 1856, without any successful result, for the line afterwards surveyed and estimated by Mr Williams was so full of Zigzags as to be unfit

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unfit for Cart traffic at its fixed slope of 1 in 20. It has however appeared to me possible to adopt a better trace by commencing the slope further to the South, and following one of the spurs which extend nearly to Tamberchery, thus rounding round the valley to the rocky ridge which crowns it; this however is mere conjecture, and it is sufficiently clear that nothing but a careful examination can lead to a practicable trace being effected.-

4. In their order on the subject the Government have directed that a complete Survey and estimate should be submitted, but it has been overlooked, that no such documents can be prepared until the trace is first made through the densely wooded and precipitous hills, and that a grant of money is absolutely necessary for effecting this object. Moreover it will demand the exclusive attention of an Officer for a considerable period during the healthy season, or from the Month of September

September till January, for at no other time of the year could these jungles be safely explored.

Thus it is evident that Lieutenant Beaumont has not at his disposal the means of complying with the instructions he have received, and it will be my object to show the nature and extent of the assistance he requires for fulfilling the intentions of Government.—

5. The roads in Wynaad are almost entirely unformed, and the hilly nature of the Country rendered it necessary that all should be correctly traced. The soil indeed is excellent, and in cases where (as in the line from Manantoddy towards the Tana Hunt) the surface is tolerably level, an excellent road is easily formed. But in general new surveys and traces are indispensably necessary, or as is shewn by Captain Beaumont great errors may be made and much money be wasted in forming bad lines.

6. I am therefore decidedly of opinion that an Officer should be especially appointed as Executive Engineer in Wynaad, and that his whole attentions should be directed to the tracing and construction of the Jambacherry Ghaut in the first place, and the roads across the Talacaud afterwards; the works should be commenced about September next, and a sum of not less than 10000 Rupees held available for the purpose. No detailed Surveys or estimates can be prepared without this preliminary outlay as it is impossible to measure accurately the work required until the lines are distinctly and permanently traced.

Bridges are urgently wanted over many streams in the Talacaud which run with great velocity in deep channels during the S. W. Monsoon, and are only passed with danger and difficulty by bamboo rafts. But bridges should not be built till the roads are surveyed.

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(2nd)

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12. I have consulted many persons on this subject and find an unanimity of opinion that establishes me the project is not only feasible, but the most easy of accomplishment of any. The Planters, some of whom have seen the system worked in Ceylon, assured me that it was practicable and economical. Mr. Robinson expressed a similar opinion and Mr. Chatfield who was sub Collector of

of Malabar during the construction of the Perambaddy Ghaut, informed me that forced labor had been employed in that work which could not have been otherwise completed, but that is of course now out of the question, and he seemed to think a permanent Corps of Coolies the best substitute, as it would be difficult to keep others regularly occupied in such distasteful labor.

13. The above remarks were written before my arrival at Cannanore, where I found a Detachment of about 50 Sappers and Miners employed in repairing the Road but having ascertained from Captain Fleming the Executive Officer, that their services could well be spared, I ordered strongly recommend that they should be sent to Wynaad, and if possible increased to the strength of a Company. With these men and a permanent body of Coolies the Wynaad roads could soon be brought into an efficient condition by an energetic and intelligent Officer, and this seems to me the only feasible way of effecting any early improvement.

14. An intelligent Officer in Command

the Jamberchery pass and the im-

command of a Company of Sappers and with power to expend 15000 Rupees in opening the Sambercherry, Ghaut, and other lines of Road in Wynaad, could, under proper Superintendence, effect a great deal of improvement in Six Months, and could submit these detailed plans and Estimates which Government require without any interference with the other works of the District, but it is necessary that the Sapper Officer should be really qualified for the duty.

Supt. Engr. Office
Sn Circle
Camp Cunnore
21st May 1857

I have the honor to be Sir
Your most obedient Servant
Signed E. Crawford
Supt. Engr. Sn Circle

True Copy
W. Salter Colonel
Chief Engineer

Comp. 88.

Central Office of P. Works
Fort. St. George 6th June. 1857.

No. 981.

From
The Chief Engineer
To
The Secretary to Govt. P.W.D.

Sir,

Public.

Tamberchery Pass
Byrnaad Roads.

I have the honor to forward, for the information and orders of Govt., the accompanying Copy of a letter from the Superintending Engineer of the Southern Circle, on the subject of the improvement of the Tamberchery Pass and Byrnaad Roads, No. 133, dated 21st May 1857, — together with two Memoranda — on the same subject prepared one by the Acting Collector of Malabar, and the other by Mr. John Wells, a Coffee planter

2. I have the honor, before submitting a detailed scheme, to request that I may be informed if Major Lawford's propositions are approved of, and if it is the wish of Govern: ment that the suggestion to raise a body of Coolies on regular Monthly pay

the Tamberchery pass and the im

Dy. No. 1154/57

Copy of a letter from the Supdg. Engr. Southern Circle to the Chief Engr. — dated 21st May 1857 — with two enclosures — on the subject of the improvement of the Tamberchery Pass and Byrnaad Roads. —

Received 5 June 1857
Dy. No. 981.

Extract from the Proceedings of the Chief Engineer dated 31st October 1857 No. 1100

Copy in a letter to Burghers dated 31st October 1857

pany shall be carried into effect.—

5. It is essential that this last question be considered and decided upon, as Major Sanford has justly implied that the steps must be taken if the improvements so much required in the Wynaad Talook of the Malabar District are to be economically and systematically carried into effect.—

Fort St George
6th June 1857

I have the honor to
Sir,
Your Most obdt Servt
W. Morris Colt
Chief Engr

To The Secy to Govt
P.W.D.

Exd WM.

the Tamburcherry pass and the im

Comm: 10 February /57 No. 24 and 25
" 15th April /56 Encs. 8-9.
Copying a letter to England dated 31st October No. 100 of 1862.

Public Works 1857 Depts
Comm 7th July No. 1164
From The Chief Engr
To The Secy to Govt
P.W.D.

Copy of Major Lawford's letter sent to the Comm of Burmah Dept 7 July 57

No 57.

Dated 26th June 1857
Rec'd 8.5 No 981.
3 Encls:
Forwards Copy of a letter from the Supt Public Works suggesting for the better prosecution of the Pegu and Prome roads, and requesting to be informed, before submitting a detailed schedule of Major Lawford's propositions are approved of, and if they the mode of Work that the suggestion to raise a body of Police on regular Monthly pay should be carried into effect

No 1300. 7th July.

C 12 June A 15 C 26 R 2 July

[illegible] the present date, this law
[illegible] vacations (with drafts and
[illegible] duties) recommending [illegible] vacations, a
total sum of 30.000 Rubles
[illegible] June the one last passed - It
[illegible] three but two weeks out of
the Official years are stated,
but I do not know that St-
[illegible] are likely to have before
[illegible] bank that requires
[illegible] immediate attention,
[illegible] still [illegible]
[illegible] the present state of
[illegible] the back-bench
[illegible] a regular [illegible] can be

[illegible] entered. Since this the
[illegible] cashier can be paid -

No presence of 50 rubles,
seems to be an unusually
favorable opportunity for
organizing an efficient
working party - If the
plan be adopted, a very
careful selection of the
officer to be in charge must
be made, and he must
if possible be taken from the
U.S. Worker Establishment, as
funds cannot be spared
for such a reserve in Paris 6213.
12-6-57

E.L.

Public Works Dept

No 1300

Extract from the Minutes of Consultation
Under date the 7th July 1857.

Read the following
Letter from the Chief
Engineer-
(Here enter 6th June 57 at 981)

47 Rd.

The project of opening
up the Wynaad country to the
coast, by forming a cart road from
Sultan's Battery in Central Wy-
naad, via the Tambracherry Pass,
to the sea port of Calicut, has
formed the subject of some* corre-
spondence. It originated in
June 1855, in a representation
from certain Coffee Planters, of
the difficulties experienced by them
in carrying their produce to the
Place of Shipment, the existing
track being only practicable to
pack bullocks. This representation
having been referred to the Engineer
and Revenue Officers, resulted in
an estimate of 48,000 Rs being
laid before Govt, for the reform of
the Tambracherry pass and the im-

* recorded in
Cons: 3d July 1855 Nos. 3. 4.
14th Aug - " — " — 37. 38.
28th Aug - " — " — 26. 27.
25th Sept. " — " — 12. 13.
15th April 1856 - " — 8. 9.
10th Feby 1857 - " — 24. 25.

provements of the roads above and below it. From the papers submitted by the Chief Engineer at the time, the first observed that the reporting officers held different opinions, as to the means to be provided for carrying the Wynaad produce to the coast; but all agreed that there was absolute necessity for providing such means, in the absence of proper existing communications. Capt. Ouchterlony saw so much objection to the reform of the Ghaut and road by the line then selected both in regard to the expense, & the natural difficulties to be encountered, that he recommended the abandonment of the project, and in lieu, the improvement of the existing pass at an outlay of 4000 Rs. To him it appeared that the Tambracherry was to be a minor route, considering on the one side, the facilities offered by the Peria Pass and road from Manantoddy in upper Wynaad to the sea port of Tellicherry, and on the other, the prospective grand

route to Mysore and the Neilgherries by the Carcoor Pass. Subsequently on being informed of the wants of the planters, Capt Ouchterlony acquiesced in the proposal of improving the Tambracherry pass; but of the two passes, he gave the preference to the Carcoor, as the better route for the Wynaad country. On the other hand, Mr. Robinson, the Acting Coll of Malabar, strongly advocated the opening of the Tambracherry Ghaut, as it was the most important route to the planting interests of the country. In a later paper, now before Govt, Mr. Robinson adheres to this recommendation. He divides the Taluk of Wynaad into North, Central, and South Wynaad; and to each division, he assigns a route to the coast, the most direct, relatively, to the division from which it is designed to lead. The Peria and Cootaddy Pass, he says, provides for North Wynaad, which exports coffee from Tellicherry. South Wynaad exports from Calicut, and requires therefore direct

communication to that port;
the Carcow pass, in Mr. Robinson's
opinion, being indisputably
the proper pass for that purpose.
The requirements of Central Ngy-
naad, by far the most important
in a planning point of view, are
those most difficult to be met.
For this division, the Jaulnacherry
pass is the direct route, but the ex-
isting track is so full of natural
difficulties, that it is proposed to
abandon it, and selecting a more
convenient line, to construct a
road for wheel carriages.

The estimate of 48,000
Rs. submitted by the Chief Engr
on the 3d Dec last, providing
for this object, having been avow-
edly an imperfect one, the Govt
could not permit its entry in the
budget. They accordingly called
for a more complete report and
estimate, with a survey of the
pass. In reply to this requisition,
the Chief Engr now submits a
report from Major Lawford, the
Supt. Engr of the Northern Circle,
made
after personal inspection of the

E. Mins. Cons. 10 Feby 95 No 294

country. He also submits a fur-
ther memo from Mr. Robinson, &
another drawn up by Mr. Wells,
one of the settlers in Central Ng-
naad. From all these papers,
the Govt are convinced of the extreme
desirableness of opening up this
hilly country, fast growing in
importance by the enterprize and
capital of European settlers; &
they are confirmed in their previous-
ly expressed opinion of the greater
consequence to Ngnaad, of esta-
blishing a communication from
it to the coast, by the Jaulnacherry
pass, rather than by the Carcow pass.
Major Lawford bears personal tes-
timony to the great difficul-
culties of the present pass, having
witnessed the sufferings of the
pack bullocks, of which hundreds,
he has been apprised, die annually
on the road, by slipping down
the rugged path, or falling over the
precipices. He, as well as the Colr,
condemn the line previously sur-
veyed and estimated for by Mr.

Revenue Surveyor Williams, as too tortuous for cart traffic, but Major Lawford and Mr. Wells, both think that a better line may be adopted, by commencing the slope further to the South, & following one of the spurs extending to Tamhraberry, thus winding round the valley to the ridge which crosses it. Major Lawford however represents that this is mere conjecture, and that nothing but a careful examination of the country can lead to a practicable trace being effected; and that until such a trace is run through the dense jungle &c., no estimate can be framed. To effect this object, he states that a grant of money is indispensably necessary; and for the preliminary operations, he requests that a sum of 10,000 Rs may be made available.

Major Lawford's proposals are to employ a separate officer to examine the Ghaut, & cut a block path, and make a survey and detailed estimate for a first class road; to organize a body of 300 coolies on regular monthly pay, as is done in Ceylon, and to employ them in cutting the trace; and to transfer a detachment of fifty Sappers and Miners now at Tammanore to Wynaad, to be associated with the coolies; & this by such organized labor under active supervision, the road may be soon brought into efficient condition. Major Lawford states that the work cannot be commenced before Sept.r next; that from that time to February, the party may work on the Ghaut, and after Feb.y when fever begins to prevail, they may be engaged on the internal communications of Wynaad, returning in Sept.r 1858 to resume work on the pass, so that internal communications and the Ghaut may both be gradually progressed. Major Lawford concludes his report thus. "An intelligent officer in

command of a company of Sappers, and with power to expend 10,000 Rs in opening the Vembacherry Ghaut, and other lines of road in Wynaad, could, under proper superintendence effect a great deal of improvement in six months, and could submit these detailed plans and estimates which will require, without any interference with the other works of the District, but it is necessary that the Sapper Officer should be really qualified for the duty." He states, however, that the complete estimate for the Ghauts cannot under any circumstances, be ready earlier than for the Budget of 1859/60.

The Govt generally approve the arrangements proposed by Major Sanford for opening up the Wynaad Country; and they are willing to grant the preliminary outlay recommended by him immediately, as they believe that they are not likely to have before them, during the present official year, a work which will require more immediate attention, not being strictly emergent, than the present state of Wynaad. The Government accordingly sanction the sum of 10,000 Rs out of the one lac placed, entered in the budget of 1857/58 for projects of an isolated character. From the 1st of September next, the commencement of the working season on the Western Ghauts, to the 30th of April 1858, up to which the present sanction will have effect, or a period

of

of eight months, 300
Coolies at 4 Rupees
each would cost 9,600
Rupees, or nearly
the sanctioned amount
of the Tambraccherry
Ghaut is said to prevent
unusual difficulties,
it is essential that
the traces should be
executed under the
direction of an expe-
rienced Engineer Officer,
and the Government
request therefore that
Lieutenant Dean, the
District Engineer, may
be directed to take
charge of the work,
leaving the Officer in
command of the Sappers
as

as an executive under
his immediate instruc-
tions and control.
The latter Officer will
be in immediate
charge of the 300 Coolies
who will be associated
in the work with the
Sappers.

The Government
trust that, Mr. Dean
the District Engineer
will be able to com-
plete the Tambraccherry
trace, and submit
a full report accom-
panied by detailed
plans and estimates
for the road, at a
period not later than
six months from

the

the commencement of operations. No funds will not be available under the estimate to be prepared for the Board before the opening of 1859/60, it will be necessary to enter an item in the budget of 1858/59, to provide for the maintenance of the working party, and the continuance of the operations now authorized in Wynaad. The attention of the Chief Engineer will be given to this point.

Application will be made to the Commander of the Forces and the Military

Military Department, for the transfer to Wynaad of the detachment of 50 Sappers and Miners now at Cannanore, if their services can be spared, as from Major Lawford's report the Regiment are best to believe, in order that they may be employed in working the Tambracherry trace, and for the services of an active, intelligent, and energetic Officer, to command them in Wynaad, and to organize the

the Coolies, under the
directions of the District
Engineer of Malabar.

In para 8
of his report, Major
Lawford alluded to
the neglected state of
the old road between
Mysore and Manan-
-toddy ever since the
construction of the
Perumbuddy Road.
The attention of
the Mysore Commis-
-sioner will be soli-
-cited to these Observa-
-tions, and the Super-
-intending Engineer
is of opinion that the
road is still a very
useful one for Wynaad,
the

the supply of labour
for the plantations
being chiefly drawn
from Mysore, while
the maintenance
of easy communi-
cations between
the two provinces, is
of great moment
to nearly numerous
officers.

I am
Sir
Your most obedient
humble Servant
C. Pringle

9 Copies to the Chief Engr. Dispr 8
3 — Duty Despr
with Copy of Engr. Lr letter

Cons: 10 Feby 57 No 24-25
15 Apl 58 " 8-9.
Copy inc: to letter to England
dated 31st October No 100 of 1862

Public Works 1857 Dep.t
Cons: 7th July
No 1300.

Extract Mins of Cons:
Dy 7th July 57.

Ex from the Mins of Cons: in the Military
Dep.t of 15th July 57 C. No 1476
Cons: Lyttelton
Re services of Lt Taylor & could he make
rail. &c in lowering the Tambraekerry Pass

ons the Comm.rs of Mysore dd 25th
Sept.r 57 C. No 1922 inc: 20 Civil
Cost of driven Mysore & Mammutty

Passing orders on a
Rep.t Sup.t Engr.
for the new Circle, offering Sug-
gestions for the improvement of
the Tambraekerry Pass and
Wynaad roads.

No 57 of 52.

From Chief Engr to Govt dd 16th June 58
C No 1337 Inc: 13th July.
From — Do — 11th Aug.t 58 C No 1870
inc: 14th Sept.r

With Ltr to the Comm.rs of Mysore
dd 7 July 1857. No 1301.

From Chief Engr 17 May 60
C No 1225 inc

C 26th June — R 2 July