Public Works (1897) Department.

Urgent-

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G.O., No. 3321 W

DATED 29. Novr 1897

[Despatch Abstract.]

Anamalai Roads: Passing orders on Note by the Chief Engineer regarding the progress made with the — ~~[illegible]~~ head up from the Commencement to end of September.

110/11

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Indexed.

P.W. 28.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

BUILDINGS AND ROADS.
CIVIL WORKS.

Government {1897} of Madras.

PUBLIC WORKS.

Recd. } 1897. Enclosures
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G.O., No. 3321 W., 29th November 1897.

NOVEMBER.

Anamalai Roads

Passing orders on note by the Chief Engineer regarding the progress made with the — from the commencement to end of September.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers :—

From J. HANNAN, Esq., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 26th October 1897, No. 579 W.

With reference to paragraphs 1, 2 and 3 of your urgent memo. No. 1446 D. of 22nd September 1897, I have the honour to enclose copy of a report from Mr. Loam.

I have written to the President of the District Board requesting him to have the road up to the Auliar river at Vannanthorai repaired. From Vannanthorai to the foot of the ghât there is a rideable bridle track : this is all that is required at present. I have requested Mr. Loam to keep this track open.

I have requested the Executive Engineer, Coimbatore, to take down the suspension foot bridge at Kullar and to despatch it to Vannanthorai where it will be taken over by Mr. Loam for erection across the river at that place.

Enclosure.

From the Executive Engineer on Special Duty, Anamalais, to the Superintending Engineer, IV Circle, dated 1st October 1897, No. 337.

With reference to your endorsement No. 522/M., dated 25th, on memo. No. 1446 P., dated 2nd September 1897, it is stated in paragraph 1 of the memorandum that the road from Angalakurchi to Muttatorai is very bad. I have the honour to remark that this route is merely a village cattle track and not recognised nor ever made as a road, but Muttatorai is a recognised ford ; and a ferry boat is kept here in the monsoon, it is a sandy crossing ; the river is wider and less swift at this point.

From Muttatorai to the foot of the ghât the cattle path is very narrow and much scoured out ; it lies through wet cultivation and a valuable piece of land would be occupied by a road if this route were selected. Carts cannot use this crossing at all, as there is no road from the river to the ghât. Whereas the road from Angolakurchi to Vannanthorai on the same river Auliar, half a mile above Muttatorai, is part of the District Board road, and mile stones have been fixed along it up to the 12th from Pollachi ; here also at Vannanthorai is a tiled shed belonging to the Forest Department.

From the 12th mile stone to the river is 6,810 feet, thus 13 miles may be considered in charge of the District Board. Span of river 300 feet : this is capable of reduction by a subsidiary bridge. Rock foundations are available for the main bridge.

On the other side of the river to the foot of the ghât is a much worn cart tract, entirely through dry cultivation and presumably also under control of the District Board, the length is 3,900 feet.

Carts travel across the Auliar river to fetch firewood and bamboos by the Vannanthorai route when the river is low, but the river is too swift here for a ferry boat to be used when in flood and crossing is impossible; close to the foot of the ghat at 2,400 feet from the big river, another bridge is requred over a small tributary of the Auliar. This drains the Villoni valley, only of small extent and fordable at most times; a small bridge similar to those I have built on the ghat, but somewhat larger is all that need be built if considered necessary.

The distance from Angolakurchi to foot of ghat by Muttatorai and Vannanthorai route would be about the same ; the road by Vannanthorai is shown on the taluk map as a District Board, road, the other is not.

Reference to paragraphs 2 and 3 of above letter, I request you will take steps to have the road from the 13th mile to the foot of ghât transferred from the District Board and apply to them for any plans or surveys showing the width of land under their control along this road. It is also to be considered if they should give a contribution from their funds to afford me information of the details if the iron work of the bridge that is advisable and also to obtain sheets Nos. 11, 12 and 13 of the Anamalai Reserve Forest maps to enable me to take out the drainage area of the Auliar river.

I have applied to the Executive Engineer, Coimbatore division, for a level.

Sections will be submitted shortly.

From J. HANNAN, Esq., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 30th October 1897, No. 590/W.

With reference to your memo. No. 1693 D. of 16th October 1897, I have the honour to enclose in original Mr. Loam's report therein called for.

With reference to the paragraph 5 of the memorandum, I beg to state that I inspected Mr. Loam's work in February 1897 and again in the following September, and the results of my inspections are given in my letters, Nos. 148/W. and 523/W., dated 13th March and 27th September 1897, respectively.

Enclosure.

From M. LOAM, Esq., Executive Engineer on Special Duty, Anamalais, to the Superintending Engineer, IV Circle, Coimbatore, dated Villoni, 26th October 1897, No. 361.

With reference to your No. 569/M., dated 19th October 1897, received on 22nd October 1897, I have the honour to submit a report of my work for the last ten months in the form required :—

Year.	Month.		Work done.
1896.	Dec.	1st to 7th	At Salem (8th December, received orders).
		12th	Left Coimbatore.
		25th	Reached Mount Stuart ; delayed by rain. The Forest Department do a large amount of work here, so I decided to work here with a gang of men to fix working rates.
1897.	Jan.	1st to 10th.	Traced 2 miles to connect Colonel Michael's road with the lowest pass out of the valley ; cut 22 chains bridle-path and fixed working rates. I was informed by the Collector that a bandy road would ultimately be required entering the hills at Punachy or Villoni and leave by Mount Stuart, so the work done in fixing rates would eventually be useful. I consider that the new country at Peralai with imported labour is manifestly not the place to fix rates, but in adjacent and similar country at Mount Stuart, I could arrive at a fair approximation.
”	”	10th to 21st.	At foot of Prince of Wales' ghât Punachy. Making enquiries about the labour ; calling for piece-worker, set labour in the first place to clear Prince of Wales' trace, found that considerable repairs were required to make it rideable, these have been done.

Year.	Month.	Work done.
1897.	Jan. 22nd to 31st.	Exploring Mr. Gass' trace beyond the estates at Punachy; found it absolutely obliterated by wild elephants; began clearing it.
„	Feb. 3rd ...	To Peralai. Exploring and tracing. Earthwork, cutting bridle-path, began on 18th.
	March ...	Tracing and superintending bridle-path.
	April ...	Do. do.
	May ...	Do. do.
	June ...	Do. last measurement of work on 24th June.
	July August	120 inches of rain fell. When weather permitted I selected route to Sirukundu, tracing 2 miles of it. Every hill and every open space along the route from which the country could be seen, I have visited.
„	Sept. 6th to 10th.	Superintending Engineer's inspection. Maintenance and repairs to bridle-path from Peralai, put in hand by one gang, lockspitting extension to Sirukundu, put in hand by another gang. After 6 days consecutively in their sheds, they came away, rain and leeches prevented work. In absence of any order or instructions, I at the same time began making the bridle-path to Peralai, 10 feet wide, throughout 12 feet in all including the allowance of 2 feet drain, beginning from end of district board road at foot of ghât by rebuilding the revetments out further to the limit of economy as to depth, thus any instructions that came subsequently, giving a definite width to be maintained would in any case be excavated to the extra width required. I intended also retracing such parts as are not suitable for a bandy as opportunity occurred when rain interfered with work at Peralai. A bridle-path now exists from the foot of the ghât to Paralai, a distance of 22 miles. My only orders were to cut a rough bridle-path to Peralai in extension of Mr. Gass's trace; this is only 5 miles, but I have completed it to the foot of the ghât. The gradient of my own trace is such that it can be converted into a bandy road. To convert the whole into a bandy road the piece between my trace and the 8th mile of the Prince of Wales' ghât, a distance of 9 miles, must be retraced and the Prince of Wales' trace widened. The gradient of the later is suitable.

See reference on the map.

Abstract.	Reference.	RS.	A.	P.
A to B	Trace from Michael's road to Anagundi pass. Traced 97 chains, after cutting 22 chains. Put a maistry on to work.			
	Cut a bridle-path, 52 chains, 6 feet wide, 45 chains lockspitted, cost	216	8	0
	Scarcity of water and fever prevented further work.			
C to D	Prince of Wales' ghât from end of district road from foot of ghât, mostly 8 feet wide, but only 4 feet for 1½ miles, where revetment is built against perpendicular sheet rock. Cleared jungle, the growth of 20 years.			
	13 revetments rebuilt.			
	2 bridges rebuilt.			
	Drain excavated, cost	484	11	11
	Timber work for bridges	621	2	0
	Work done in September, making this ghât 10 feet wide from foot, spent	300	0	0
	Work this month anticipated	500	0	0
	Prince of Wales' ghât distance from foot including parts now in use utilized for bridle-path, 7 miles, 6 furlongs.			
D to E	Connecting trace to a point on right of way in waterfall estate.			
	Total distance 6,665 feet, a gradient of 1 in 12 for bridle-path only.			
	2,785 feet have been cut, 3 feet wide and joined in to existing road and easily rideable.			
	Remainder of distance only lockspitted to the point in right of way as it would be expensive to cut, requiring a lot of blasting, having no orders declined responsibility. This last bit avoids an unnecessary rise and fall in the existing path, actual cost	100	0	0
E to F	No work done in estate except cutting a few trees to make passage easier.			
	Mr. Gass cleared this path.			
F to G	Mr. Gass's trace, cut 6 feet wide including side drains serviceable as bridle-path only.			
G to H	My new trace in continuation on a gradient that can be converted to a bandy road if required. Total distance, 41,933 feet, F to H or just 8 miles, cost	1,947	10	0
	Cut 6 feet wide including drain department work—			
	Preliminary expenses Tracing	1,006	4	9
	Building inspection sheds	140	4	0
	Coolies' huts and cost of iron sheets	321	4	0
	Boring and cost of dynamite	545	14	0
	Carriage of tools	65	4	6
		2,078	15	3
I to J	Extension of trace towards Sirukundu through blocks taken up; traced 2 miles; this joins into my bridle trace; 1½ miles from Peralai this is proceeding.			

Portion remaining to be done—on information afforded me in conversation with Mr. Bradley that a bandy road would eventually be required throughout the hills J to B to join Sirukundu to Aiakundi pass; this can be rapidly pushed on now; working season has begun; it has been impossible to get coolies to work in the rain in the last three months.

With reference to the staff required, I applied for an Overseer in my letter, No. 110 of 5th March 1897. I believe the Superintending Engineer has applied for establishment.

With regard to opening up the country, I request an explanation of the phrase; as I understand it a scientifically-traced path is required through the land not yet applied for, and its survey is required for publication to induce the public to come forward to take up estates. Converting the present bridle-path to Peralai into a bandy road is not, in my opinion, yet required; it would only benefit a few interested persons who have already paid for their land and requires nine miles more tracing. To make a bandy road, proper estimates are required made from levels and sections; this would take the best part of a working season; if required, this should be put in hand at once and proper establishment entertained to take advantage of the cold season. Execution of work is possible on the ghât; most of the year rain is comparatively slight compared to Peralai, and there are no leeches; labour is close. But now only is work possible at Peralai, from now till beginning of June for pioneer work. This I can undertake without assistance if I am not bound to be present when work under execution requires laying out and measuring up.

The alignment of the main road, I was informed in the Government orders received on 8th December 1896, would be communicated to me by the Collector and his Forest officer; in reply to my request for instructions, the Collector in his letter, dated 6th January, deferred this till after June when the land auctions would take place. The working season has begun, and in my letter, No. 323, dated 15th September 1897, I have again applied for instructions. Meanwhile, the extension beyond Peralai will proceed governed purely by engineering considerations—the best, the cheapest and most direct route with the least bridging to serve the bulk of the most likely land beyond Sirukundu and toward Mount Stuart to join into my trace already done to the lowest pass on the watershed on that side. Whether this is correct or whether certain blocks only must be served, I have yet to be informed.

With reference to paragraph 4 of the above-quoted reference, I am unable to understand it. In the light of present information, it is said my conduct on this road work is considered very unsatisfactory.

I have the honour to point out that the same information exists about my work as regards the work of every member of the department from the periodical departmental forms and statistics which have been duly forwarded. Further my work has been twice specially inspected by you, Sir, and favourably commented on in your last report. My orders were to make a rough bridle-path to Peralai in continuation of Mr. Gass's trace. I have exceeded them considerably by completing a bridle-path to the foot of the ghât, and this has taken me alone unaided the whole of last working season. I have cautiously proceeded with very necessary work and liberally interpreted the orders I received, but it has been my experience in eleven years of service that it is not safe to speculate on the manifest intentions of Government but to confine oneself to orders.

I would draw attention to the conditions of work here; it was an entirely unknown country; few Government officers have ever been to Peralai and none beyond. No information could be obtained about it. Only with magnetic compass and map can one escape being lost; nothing can be seen in the dense forest. Of three maistries I have had two were incapacitated by fever, and my writer and lascars have suffered much from the same cause. I have had no assistance from the regular staff of the department in the district in procuring labour. One sub-overseer appointed to serve under me resigned rather than work in these hills.

The Forest Department have discouraged all my attempts to obtain hill-men—the only suitable labour for jungle cutting and tracing; it interferes no doubt with their petty revenue, but trebles the cost of this particular work.

The whole work was done with money advanced at my own risk and that this risk was heavy is proved by the fact that Mr. Windle's agent now opening land at Peralai has filed suits against every one of his original contractors and obtained decrees for money advanced. I have had to work with similar men, by the exercise of great caution only I have committed Government to no loss.

I request that I may be furnished with the specific accusations I have now to meet and informations by whom they are made.

I have already replied to complaints made by certain unofficial persons as to the delay up to February whom the immediate execution of my orders would have benefited. I maintain it was necessary to fix working rates and not to proceed to work regardless of expense; further, the work executed, whilst these were being ascertained, would ultimately be useful, however it may have been an error of judgment on my part this is not a famine work and not emergent; I understood work should proceed in a scientific and professional manner.

I proceeded to Peralai on 3rd February and began tracing on 18th cutting, the bridle-path was commenced at both ends simultaneously and finished on 24th June.

The contract was undertaken by Mr. Windle's agent. This was a guarantee I imagine, that it would be done as soon as possible as he was urgently wanting to use it and I had to be present to measure up every 8 days and make payments and meanwhile as well to see that the provisions of the specification were adhered to. In July and August the weather did not permit me to camp in tents beyond Peralai, but I made many long excursions to prospect, cooly work was out of the question and in September also. In this month I sent two gangs to Peralai but they came away on account of rain. I organized, meanwhile, the thorough repairs to the Prince ghât.

I beg for favourable considerations of the conditions under which the work had to be carried out the reports and complaints from outside have caused me much anxious worry. The standard fixed by this section of the public arrived at by lifelong experience in opening virgin forest with little knowledge, probably of anything else is not a fair one by which to judge an engineer and an official trammelled by department traditions.

I have endeavoured to do my duty as I saw it.

Note on the Anamalai Roads.

With reference to His Excellency's remarks on this Office-note, dated 6th September 1897, a progress report of Mr. Loam's work, from the commencement to end of September, has been received and is herewith attached.

2. A preliminary report on the questions raised by Mr. Windle has also been received and a further report in detail is promised when the necessary investigations have been made.

3. With regard to His Excellency's question regarding the blame to be attached to Mr. Hannan or to Mr. Loam, it will be necessary to give a summary of what has occurred in connection with this Anamalai road.

4. In G.O., No. 495, Revenue, dated 28th September 1896, paragraph 6, the first reference to the intention of Government with regard to the road on record in this office occurs. It runs thus: "The Government is prepared to undertake the construction of a main road through the land which it is now proposed to lease out for cultivation, and the Public Works Department will be requested to arrange for the immediate tracing of such a road with the necessary principal branches. The requisite width on either side of this tracing should be reserved to Government and excluded from lease." This Government order was communicated to the Superintending Engineer, IV Circle, on 10th November 1896.

5. The next reference occurs in G.O., No. 694, Revenue, of 4 [illegible]ember 1896, paragraph 6, and is as follows:—

> "The question of the direction of the main road which is designed to open up the Anamalais must be left to the Collector and his District Forest-officer, who should in communication with the Public Works officer in charge of the road, arrange as far as possible to adopt the most convenient line. The Collector should bear in mind that the object in view is the construction of a main road along the trace which is most suitable, having regard on the one hand to the difficulties of making a road and on the other to the desirability of taking it to the heart of the country to be opened up. The tracing and construction of the road are matters to which Government attaches great importance and must be carried out with as much expedition as possible. The special attention of the Public Works Department and of the Collector will be drawn to this matter, but the Government cannot give any positive assurance as to the date within which the road will be completed." This Government Order was communicated to the Superintending Engineer, IV Circle, on 9th December 1896, and this special attention was drawn to the above paragraph.

6. Mr. Loam was appointed to this special duty, and directed to work immediately under the Superintending Engineer in this office memo., No. 3610 C., of 20th October 1896, to the Superintending Engineer, IV Circle.

7. Mr. Loam was directed to place himself in communication with the Collector of Coimbatore in regard to the lines of road to be surveyed in this office memo., No. 1505 D., dated 7th October 1896, to the Superintending Engineer, IV Circle.

8. Mr. Loam was directed in this office memo., No. 4551 C., dated 2nd December 1896, to the Superintending Engineer, IV Circle, "to open a rough bridle-path fit for bullocks at once from the end of Mr. Gass's path to Peralai on the Anamalais."

9. Mr. Loam placed himself in communication with the Collector on 18th December, but got no definite information beyond the statement that the road must certainly pass through Peralai.

10. The actual work done by Mr. Loam to end of September as summarised in his progress report is as follows:—

For letters (*vide* attached sketch-map).

STATEMENT of work done by Mr. Loam, Executive Engineer, on Anamalais roads.

Sketch-map.		Description of work.	Distance.		Remarks.
From	To		M.	Ch.	
A	B	Ran a trace from Michael's road to Anagundi Pass.	1	17	This was unauthorised, but will eventually be useful.
		Cut a bridle-path 6′ wide along above trace.	0	52	
		Lockspitted	0	45	
C	D	Cleared and improved Prince of Wales ghât so that it can be used as a bridle-path.	7	60	This was also apparently done without orders, but it is eminently useful work.
D	E	Ran a trace of 1 in 12 for bridle-path to avoid an unnecessary rise and fall in the existing path.	1	21	This is apparently an alternative route to the existing track to be used as a bridle-path only.
		Cut above trace 3′ wide for riding, and lockspitted the rest.	0	42	
E	F	Mr. Loam did nothing here except cut a few trees. Mr. Gass, the Forest officer, cleared this length.	..	..	
F	G	Mr. Gass's trace, which Mr. Loam has apparently cut 6′ wide with side drains, to serve as a bridle-path only.	..	..	It is not clear whether Mr. Loam did this or found it already in good order.
G	H	Mr. Loam's new trace. Length from F to H.	8	0	This is the work Mr. Loam was ordered to do (*vide* paragraph 8 above). He has exceeded his instructions, as he has made it of a sufficiently easy gradient for cart traffic.
		Cut 6′ wide. Can be converted into a bandy track.			
I	J	Ran a trace from point on bridle-path last mentioned 1½ miles from Peralai towards Sirukunda through land taken up.	2	0	Mr. Loam is now at work on this. The work was ordered in this office No. 3139 C., dated 9th July 1897.

It will thus be seen that Mr. Loam has done a good deal more work than he was originally ordered to do, and that, although some of it was unauthorised, and in another place he exceeded his orders, it will all prove eventually useful. I consider that, except in one particular, he was the wrong man for the work, because he did not know the language, he is very unmethodical and wants careful guidance, and his energy often seems spent in wrong directions. But that one particular, viz., his apparent immunity from fever, makes him exceptionally valuable for work in these very unhealthy jungle tracts, and I think he should be allowed to remain to complete the work. The difficulties attendant on work in these out-of-the-way places are very great, and looking to these and to the fact that he has worked single-handed, and with very little guidance from his Superintending Engineer, I think the work done may be considered satisfactory, and that he is not deserving of censure.

11. Mr. Hannan, the Superintending Engineer, inspected the work twice in February and September 1897 (*vide* his reports attached).

I think that a Superintending Engineer with a true sense of his duties should not have left an officer requiring so much guidance as Mr. Loam evidently does to his own devices for seven months, and to this extent I consider him to blame. Mr. Hannan appears to have thought (*vide* paragraph 4 of his No. 523 W. of 27th September 1897), that Mr. Loam was not under his orders but under those of the Collector, but this is a complete misapprehension (*vide* paragraph 6 above).

12. It has now to be considered what further work is required. As far as I understand the matter, without having seen the ground, a rideable track suitable for pack bullocks now exists from the Auliar river to Peralai, several parts of which are also suitable for cart traffic, and Mr. Loam is now engaged in running a trace for a bridle-path onwards from Peralai to Sirukunda—

(1) The original intentions of Government (see paragraphs 4 and 5 above) appear to have been to construct a main road through the land which it is proposed to lease out for cultivation, which apparently means that a *cart* road was to be made from the Auliar river for several miles beyond Peralai.

(2) Mr. Gass, the Forest officer, thinks (*vide* his inspection notes of 4th June 1897, paragraph 12), that "there is certainly no immediate hurry for the opening of a main or cart road," but neither the Collector nor the planters appear to have given an opinion on this point and, if it *is* the intention of Government to make such a road, it would be well to obtain their opinions.

(3) Mr. Hannan estimates the cost of such a road from the Auliar river to Peralai (32) miles at Rs. 2,50,000 and its further extension to Anaigundi pass near Mount Stuart (point B on sketch-map) 40 miles, which the Collector seems to contemplate, would, at the same rate, cost another 3 lakhs.

(4) While this matter is being settled, I propose to issue orders to cut a bridle-path from Peralai to Sirukunda on the trace now being made, and to give Mr. Loam the services of Sergeant C. J. Smith, Supervisor, 2nd grade, now serving in the Kistna, which have been applied for by Mr. Hannan in paragraph 5 of his No. 523 W. of 27th September 1897; as it is an almost impossible task for Mr. Loam to do survey work and construction simultaneously, and look after the latter properly.

13. With regard to Mr. Windle's statement about the approaches to the Auliar river, attention is invited to Superintending Engineer's No. 579 W., dated 26th October 1897.

It is the duty of the district board to keep the road in order from Angalakurchi to the north (right) bank of the river, and the attention of the President of the Board has been called by the Superintending Engineer to this fact; and Mr. Loam has been ordered to keep the track open on the south bank to foot of ghât, while the Kullar suspension bridge has been sent for and will be erected on arrival. It is, however, only suitable for foot passengers.

(Signed) W. B. DEWINTON,
Ag. Chief Engineer.

16th November 1897.

ORDER—No. 3321 W., dated 29th November 1897.

His Excellency the Governor in Council agrees in the opinion expressed in the latter part of paragraph 10 and in paragraph 11 of the Chief Engineer's note above recorded.

2. A report from the Collector on the point mentioned in paragraph 12 (2) of the note will be called for in the Revenue Department.

3. The proposals in paragraph 12 (4) are approved.

(True Extract.)

Under Secretary to Government.

To the Superintending Engineer, IV Circle.
" Revenue Department.
" Local and Municipal Department.

Ex1. Shaik Karim.

A [illegible]

[4
600—14-10-97.]

DEPARTMENT.

Print [illegible]

13 p

Papers to be read in proceedings :—

189 , No.

Again G.O., dated 189 , No.

Again G.O., dated

Current No. 10689 of 1897, dated 26.10.97, from the S.E. IV circle

" " 10778 " 1897, " 30.10.97, " —do—

" " " 189 , " , "

Pro. Note by the Chief Engr. P.W. Dept of 16.11.97

P 3321 W. d 29.11.97

ORDER.

B [illegible]

H.E. the Governor in Council agrees in the opinion expressed in the latter part of para 10 & in para 11 of the Chief Engineer's note above recomm

2. A report from the Collector on the point mentioned in para 12(2) of the note, will be called for in the Rev. Dept.

3. The proposals in para 12(4) are approved.

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[illegible]
23/11/97

[illegible]
23.11.97

The Secy to Govt. Rev. Dept. for favour of concurrence [illegible]

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B
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S.E. IV Circle
Rev. Dept
[illegible] Dept.

8/11/97

25/11/97.

42

9.P

Public Works Department.

Note on the Anamalai Roads.

~~* Flag A~~

With reference to His Excellency's remarks on this office note d/ 6th September 1897, a progress report of Mr. Loam's work from the commencement to end of September has been -- received and is herewith attached.

~~† Flag. B~~ Seen. A.S.H

2. A preliminary report on the -- questions raised by Mr. Windle has also been received, and a further report in detail is promised when the necessary investigations have been made.

~~‡ Flag C~~ Seen. A.S.H

3. With regard to His Excellency's question regarding the blame to be attached to Mr. Hannan or to Mr. Loam, it will be necessary to -- give a summary of what has occurred in connection with this Anamalai -- Road.

~~& Flag D~~

4. In G.O. No. 495 Rev. dated 28th September 1896, Para 6, the first -- reference to the intention of Government with regard to the road on record in this office occurs. It runs thus:-"The Government is prepared to undertake the construction of a -- main road through the land which it is now proposed to lease out for

cultivation

4-11-97

cultivation, and the P. W. D. will be requested to arrange for the immediate tracing of such a road with the necessary principal branches. The requisite width on either side of this tracing should be reserved to Government and excluded from lease". This G.O. was communicated to the Superintending Engineer IV Circle on 10th November 1896.

5. The next reference occurs in G.O. Rev. No. 694 of 4th December 1896, Para 6, and is as follows:-

+ Flag E.

"The question of the direction of the main road which is designed to open up the Anamalais must be left to the Collector and his District Forest officer, who should in communication with the P.W. officer in charge of the road, arrange as far as possible to adopt the most convenient line. The Collector should bear in mind that the object in view is the construction of a main road along the trace which is most suitable having regard on the one hand to the difficulties of making a road, and on the other to the desirability of taking it to the heart of the -- country to be opened up. The tracing and construction of the road are -- matters to which Government attaches great importance, and must be carried out with as much expedition as --- possible.

possible. The special attention of the P. W. D. and of the Collector will be drawn to this matter, but the -- Government cannot give any positive assurance ~~answer~~ as to the date within which the road will be completed." This G.O. was communicated to the Superintending Engineer IV Circle on 9th December 1896, and his special attention was drawn to the above para.

6. Mr. Loam was appointed to this special duty, and directed to work immediately under the Suptg. Engineer in this office Memo No. 3610 C of 20th October 1896 to the Suptg. Engineer IV Circle.

+ Flag F.

7. Mr. Loam was directed to place himself in communication with the Collector of Coimbatore in regard to the lines of road to be surveyed in this office Memo No. 1505 D dated 7th October 1896 to the Superintending Engineer IV Circle.

Flag H

8. Mr. Loam was directed in this office Memo No. 4551 C dated 2nd Dec. 1896 to the Superintending Engineer IV Circle, "to open a rough bridle path fit for bullocks at once from the end of Mr. Gass's path to Peralai on the Anamalais".

* Flag I

9. Mr. Loam placed himself in communication with the Collector on 18th December, but got no definite information beyond the statement that the road must certainly pass

3 Flag J

through Peralai.

10. The actual work done by Mr. Loam to end of September as summarised in his Progress Report is as follows:-

For letters *vide* attached sketch map.

Statement of work done by Mr. Loam, Executive Engineer, on Anamalais Roads.

Sketch Map		Description of work.	Distance		Remarks.
From	To		M.	Ch.	
A	B	Ran a trace from Michael's road to Anagundi Pass..........	1	17	This was unauthorised but will eventually be useful.
		Cut a bridle path 6' wide along above trace..................	0	52	
		Lockspitted..................	0	45	
C	D	Cleared and improved Prince of Wales ghat so that it can be used as a bridle path..........	7	60	This was also apparently done without orders, but it is eminently useful work.
D	E	Ran a trace of 1 in 12 for bridle path to avoid an unnecessary rise and fall in the existing path................	1	21	This is apparently an alternative route to the existing track to be -- used as a bridle path only.
		Cut above trace 3' wide for riding, and lockspitted the rest.	0	42	
E	F	Mr. Loam did nothing here except cut a few trees. Mr. Gass, the Forest officer, cleared this length.			
F.	G	Mr. Gass's trace, which Mr. Loam has apparently cut 6' wide with side drains, to serve as a bridle path only.			It is not clear whether Mr. Loam did this or found it already in good order.
G	H	Mr. Loam's new trace. Length from F to H........................	8	0	This is the work Mr. Loam was ordered to do. *vide* para 8 above. He has exceeded his instructions, as he has made it of a sufficiently easy gradient for cart traffic.
		Cut 6' wide wide. Can be converted into a bandy track.			

I

Sketch Map		Description of work.	Distance.		Remarks.
From	To		M	Ch.	
I	J	Ran a trace from point on bridle path last mentioned 1½ miles from Peralai towards Sirukunda through land taken up.	2	0	Mr. Loam is now at work on this. The work was ~~and~~ ordered in this office No. 3139 C dated 9th July 1897. (~~Flag N.~~)

It will thus be seen that Mr. Loam has done a good deal more work than he was originally ordered to do, & that, although some of it was unauthorised, and in an other place he exceeded his orders, it will all prove eventually useful. I consider that, except in one particular, he was the wrong man for the work, because he did not know the language, he is very unmethodical and wants careful guidance, and his energy --- often seems spent in wrong directions. But that one particular, *viz*, his apparent immunity from fever, makes him exceptionally valuable for work in these very unhealthy jungle tracts, and I think he should be allowed to remain to complete the

the work. The difficulties attendent on work in these out of the way -- places are very great, and looking to these and to the fact that he has worked single-handed, and with very little guidance from his Superintending Engineer, I think the work done may be considered satisfactory, and that he is not deserving of censure.

Seen. A.S.H

11. Mr. Hannan, the Superintending Engineer inspected the work ~~since~~ twice + in February and September 1897, vide his reports attached.

+ Flags K & M.

I think that a Superintending Engineer with a true sense of his duties should not have left an officer requiring so much guidance as Mr. Loam evidently does to his own devices for 7 months, and to this extent I consider him to blame. Mr. Hannan appears to have thought (vide # para 4 of his No. 523 W of 27th Sept. 1897) that Mr. Loam was not under his orders but under those of the Collector, but this is a complete misapprehension. Vide Para 6 above.

I agree. A.S.H.

Flag M

12. It has now to be considered what further work is required. As far as I understand the matter, without having seen the ground, a rideable track suitable for pack bullocks now exists from the Auliar river to Peralai, several parts of which are also -- suitable for cart traffic, and Mr. Loam is now engaged in running a trace for a bridle path onwards from Peralai to Sirukunda.

(1) The original intention of Government (See paras 4 & 5 above) appear to have been to construct a main -- road through the land which it is proposed to lease out for cultivation, which apparently means that a cart road was to be made from the Auliar river for several miles beyond Paralai.

(2) Mr. Gass, the Forest officer, --- thinks vide + his inspection notes of 4th June 1897, Para 12, that "there is certainly no immediate hurry for the opening of a main or cart road", but neither the Collector nor the planters appear to have given an opinion on this point and, if it is the intention of Government to make such a road, it would be well to obtain their opinions.

Flag N.

(3) Mr. Hannan estimates the cost of such a road from the Auliar river to ? Paralai (32) miles at Rs. 2,50,000 and its further extension to Anaigundi Pass near Mount Stuart (point B on sketch map) 40 miles, which the collector seems to contemplate, would, at the same rate cost another 3 lakhs.

(4) While this matter is being --- settled, I propose to issue orders to

to cut a bridle path from Paralai to Sirukunda on the trace now being made, and to give Mr. Loam the services of Serjt. C. J. Smith, Supervisor 2nd grade now serving in the Kistna, which have been applied for by Mr. Hannan in Para 5 of his No. 523 W of 27th September 1897; as it is an almost impossible task for Mr. Loam to do survey work and construction simultaneously, and look after the latter properly.

App'd.
A.S.H.

+
Flag M

13. With ~~reference~~ regard to Mr. Windle's statement about the approaches to the Auliar River attention is invited * to Superintending Engineer's No. 579 W dated 26th October 1897.

*. Flag C.

It is the duty of the District Board to keep the road in order from Angalakurchi to the North (right) bank of the river, and the attention of the President of the Board has been called by the Superintending Engineer to this fact; and Mr. Loam has been ordered to keep the track open on the South bank to foot of ghat, while the Kullar suspension bridge has been sent for and will be erected on arrival. It is however only suitable for foot passengers.

Seen.
A.S.H.
19.11.97

L Beale 16.11.97

H.E. 16-11-97. R 22-11-97

Anamalai Road 29/11

W

It is proposed to bring your note on record as a Chief Engr's note, and to print it in the Proceedings.

If this be not approved, the note will be omitted, & a G.O. in more detailed terms might be drafted.

C
22/11/97

Submitted through D.W.

AWH
23/11/97

Yes. It may as well all be printed

23/11

arrange as [illegible] then
~~[illegible]~~ orders [illegible] see the no
[illegible] [illegible]
125 16.10.87

Circulate
[illegible]
16/10/87
312500

~~& arranged as or~~. those referred & placed on the top as ordered. The rest of the papers are tied together & are at the bottom of the file. This arrangement is not however in accordance with the orders issued by Govt. It can however stand if the papers tied together at the bottom are removed before it [illegible]

10888

W.C.

[illegible]

Please arrange & flag all these papers

W/

The papers noted have been flagged + separately done

---

that the Acting Head Clerk has been corresponding about this work with the Chief Engineer direct. As I have to deal with the monthly progress reports and other matters bearing on the question of Expenditure it is, I think, important that I should know what is going on, or I must make mistakes. It seems therefore necessary to pass orders to the effect that all correspondence connected with the progress of works should pass through me, and if you would pass such an order I should feel obliged. It will be seen from this correspondence that I had, previous to last September, been dealing with this particular subject from the first, and there is apparently no reason for the inconsistency now brought to notice.

AMS
30.10.97.

see W's order on back
[illegible] 1.11.97.

106 [illegible]

W

This is a reply to Col. Campbell's memo. dated 22.9.97 — no. 1222 G.O.

a reply to your memo. No 1693 D. of 16.10.97 might probably be awaited.

Ch.
29.10.97

W.

~~When~~ dealing with the Progress Report of works in ~~[illegible]~~ I wrote yesterday I was unaware that the Superintending Engineer had lately visited the locality, for I had seen no correspondence on the subject of this bridle path since July, or I would not have urged the immediate necessity of another visit.

334th Note on the Anamalai Roads

With reference to H.E.'s remarks in this Office note dated 6.9.97 a progress Report of Mr. Evans on works from the commencement to end of September has been received, and is herewith attached.

Flag. 2. A preliminary report on the Martino by Mr. Hindle has also been received, & a fuller report in detail is promised when the necessary investigations have been made.

Flag. 3. With regard to H.E.'s question regarding the blame to be attached to Mr. Evans or to Mr. Stauman it will be necessary to give a short summary of what has occurred in connection with this Anamalai Road.

Flag C 4. In G.O. No 495 Rev. dated 28 Sept. 1897 Para 6 ~~it is~~ the first reference to the intentions of Govt. with regard to the road in record in this Office occurs. It seems that "the Govt. is prepared to undertake "the construction of a main road

" through the land which it is now
" proposed to lease out for cultivation,
" & the P.W.D. will be requested to
" arrange for the immediate tracing
" of such a road with the necessary
" principal branches. The requisite
" width on either side of this tracing
" should be reserved by Govt. & excluded
" from lease" —

4. This G.O. was communicated to
the S.E. IV Circle on 10 Novr.
1896.

5. The next reference occurs in G.O. — Flag E.
Rev. No 694 of 4 Dec. 96. Para 6.
& is as follows
" The question of the direction of
" the main road which is designed
" to open up the Anamalais must be
" left to the Collector & his District
" Forest Officer, who should in
" communication with the P.W. Officer
" in charge of the road, arrange as
" far as possible to adopt the most
" convenient line. The Collector should
" bear in mind that the object in
" view is the construction of a main
" road along the trace which is
" most suitable having regard on

" the one hand to the difficulties of
" making a road, & on the other to
" the desirability of taking it through
" the heart of the country to be opened
" up. The tracing & construction of the
" road are matters to which Govt.
" attaches great importance, & must
" be carried out with as much expe-
" -dition as possible. The special
" attention of the P.W.D. & of the
" Collector will be drawn to this
" matter, but the Govt. cannot give
" any positive assurance as to the
" date within which the road will
" be completed."

This G.O. was communicated to
S.E. IV on 9 Dec. 1896, & his
special attention was drawn to
the above Para. —

6. Mr. Adam was appointed to this
special duty & directed to work
Flag B. — immediately under the S.E. in
this office Memo. No 2610 C of
20 Oct. 1896 to S.E. IV.

7. Mr. Adam was directed to place
himself in communication with

the Collector of Coimbatore in regard to the lines of road to be surveyed. Flag A in this Office memo 1505 D dated 7 Oct. 96 to L.S. IV.

8. Mr Swan was directed in this Office memo No 4551 C dated 2 Dec 1896 to L.S. IV. "to open a rough bridle path fit for bullocks at once from the end of Mr Cass's path to Peralai in the Anamalais".

~~These are apparently the only orders which Mr Swan ever received from this Office –~~

9. Mr Swan placed himself in communication with the Collector on 14 Dec, but got no definite information beyond the statement Flag P that the road must certainly pass through Peralai –

10. The actual work done by Mr Swan to end of Sept as ~~described~~ summarised in his Progress Report is as follows vide attached sketch map

Statement of work done by Mr Swan Exec. Engr in Anamalai Roads.

Sketch map No. From	To	Description of work	Distance m.	chs	Remarks
A	B	Ran a trace from Michaelz Road to Anaipundi Pass –	1	17	This was unauthorized but will eventually be useful.
		Cut a bridle path 6' wide along above trace	0	52	
		Rock splitted	0	45	
C	D	Cleared & improved Prince of Wales Point so that it can be used as a bridle path	7	60	This was also apparently done without orders, but it is eminently useful work
D	E.	Ran a trace of 1 in 12 for bridle path to avoid an unnecessary rise & fall in the existing path –	1	21	This is apparently an alternative route to the existing track to be used as a bridle path only.
		Cut above trace 3' wide for riding & rock splitted the rest.	0	42	
E	F	Mr Swan did nothing here except cut a few trees – Mr Cass, the Forest Officer, cleared this length.			
F	G	Mr Cass's trace – which Mr Swan has apparently cut 6' wide with side drains to serve as a bridle path only.			It is not clear whether Mr Swan did this or found it already in good order.

Sketch Map From	To	Description of work	Distance M. Ch.	Remarks
G	H	Mr Graeme's new trace - length from 7 to H cut 6' wide. Can be converted into a bandy track.	8 0	This is the work Mr Graeme was ordered to do vide Para 8 above. He has exceeded his instructions as he has made it of a sufficiently easy gradient for cart traffic.
I	J	~~Traced~~ Ran a trace from point on bridle path east meridional 1½ miles from Geralai towards Trimbunda through cane brake up	2 0	Mr Graeme is now at work on this. ~~He seems to have under-taken it as the result of conversations with the Collector & it is apparently his intention to continue~~ eventually ~~it~~ to B.

The work was ordered in this office 3139 C dated 9 Jul 97 Hy N.

It will thus be seen that Mr Graeme has done a good deal more work than he was originally ordered to do, & that although some of it was unauthorized & in another place he exceeded his orders, it will all prove eventually useful. I consider that except in one particular he was the very man for the work

because he did not know the language. He is very unmethodical & wants careful guidance, & his energy often seems in wrong directions. But the one particular, viz his apparently unwearying perseverance, makes him exceptionally valuable for work in these very unhealthy jungle tracts, & I think he should be allowed to remain to complete the work. The difficulties attendant on work in these out of the way places are very great, and considering these & the fact that he has ~~had~~ worked single-handed, ~~very little~~ with very little guidance from his Supdg Engr, I think the work done may be considered satisfactory, & that he is not deserving of censure.

11. Mr Hannan, the Supdg Engr. inspected the works twice in February & September 1897.

vide his reports attached
I think that a Subordinate with
a true sense of his duties should
not have left an officer requiring
so much guidance as Mr
Fraser evidently does to his own
devices for 7 months, and to this
extent I consider him to
blame — Mr Shannan appears to
have thought (vide para 4 of
his No $\frac{520}{W}$ of 27 Sept 82)
that Mr Fraser was not under
his orders but under those of
the Collector — but this is
a complete misapprehension
vide Para 6 above

Flag

Flag

12. It has now to be considered
what further work is
required — As far as I
understand the matter, without
having seen the ground, a
rideable track suitable for
pack bullocks from Liento
from the Ambar river
to Paralai, several parts
of which are also suitable

4

for cart traffic, and Mr Shannan
is now engaged in ~~[illegible]~~ making a trace for a
bridle path onwards from
Paralai to Surlakanda —
The original intentions of Govt
(see Para 4 above) appear
to have been to construct a
main road through the land
which it is proposed to leave
out for cultivation — which
apparently means that a cart
road ~~of~~ was to be made for seven
miles beyond Paralai — the Ambar river
Mr Gass the Forest Officer, thinks
vide his inspection notes of 4
June 1887 Para 12, that "there
is certainly no immediate
hurry for the opening of a
main or cart road" — but
neither the Collector nor the
planters appear to have given
an opinion on this point

Flag N.

& if it is the intention of Govt
to make such a road it
will be well to obtain
their opinions – the cost
Mr Hannan estimates
of such a road from the
Anher River to Varalei
(32 miles) at Rs 2,50,000 –
and its further extension to
Anaymudi Pass near Mount Stuart (point B in
sketch map) which the Collector seems to contemplate 40 miles would
at the same rate cost
another 3 lakhs –
While this matter is being settled
I propose to issue orders to
cut a bridle path from Varalei
to Sirukunda on the trace
now being made & to give
Mr Swain the services of
Sergt C.P. Smith, Supervisor 2nd Grade
now serving in the Kistna,
which have been applied for
by Mr Hannan in Madras

Flag

of this No $\frac{520}{W}$ of 27 Oct. 97,
as it is an almost impossible
task for Mr Swain to do
survey work & construction
simultaneously & look after
the latter properly –

13. With regard to Mr Lindley's
statement about the approaches
to the Anhar River attention
is invited to his letter to Govt
$\frac{579}{W}$ dated 26 Oct 97 –
It is the duty of the District
Board to keep the road
in order from Angalakurichi to
the North (right) bank of the river

& the attention of the Board of the Hd has been called by the D.S. to this fact

& Mr Swain has been ordered
to keep the track open on the
South bank to foot of Ghat,
while the Hullar suspension
bridge has been sent for &
will be erected on arrival.
It is however not suitable
for foot passengers

18 XI

10888

OW

The Supdt. Surveys reply to this office memo. No. 1693 D of 16.10.97 has now been received, & is submitted for orders.

2.11.97

W.

Mr. Loam's report called for in your memo No. 1693 D of 16th Octr. 1897 has also been received and is submitted. On page 5 it will be seen that he asks for an interpretation of the phrase "opening up the country". I suppose "opening out" would be more correct than ~~that~~ "opening up" and that the cutting of a bridle path is implied. This is a point, however, on which the Superintending Engineer might instruct Loam.

Frontier Supdt.

Engineer's letter No $\frac{623}{W}$ of 27/9/97 it will be seen that he considers Mr Loam's work satisfactory.

CWH
6.11.97.

Flag E

I find in G.O. No 495 Rev. of 24 Sep 96 that Govt. intended that a main road should be constructed thro' the land which it was proposed to lease for cultivation, & that the P.W.D. was expected to arrange for the immediate tracing of such a road with the necessary principal branches. I cannot find that these orders were in any other way communicated to L.G.T.O. Please have ~~to Mr Loam~~ – this case a precis made of this as soon as possible [illegible]

of Jan:

On

With reference to his note please see the précis flagged H, which contains a full history of the work. Perhaps this will meet his requisition.

Cu

8-11-97

---

require. G.O. No. 495 Revenue of 28th September 1896 was communicated to the Supg. Engineer IV Circle with this office No. 3211 dated 10th November 1896 ("flag" C).

C.W.S.

10-11-97.

W.

On looking through these papers - several of which did not come through me - I see no orders to carry out any construction work except from the boundary of Waterfall Estate ~~boundary~~ to Paralai (G.O. No 846 W of 23rd March 1897, "flag" I), and these orders refer to the construction of a bridle-path between these places i.e. from one end of Mr. Lean's trace to Paralai along the line F.G.I.H. of the accompanying tracing. Therefore all other work apparently refers only to the preparation of a trace - Colonel Campbell had a precis prepared: it is flagged H and will probably give all the information that you

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Public Works (1897) Department.

CURRENT No. 10888

Order

From The Supg. Engineer 4th Circle

No. 590/W

Dated 30th October 1897

Received 2-11-97

Enclosures Two. (1 plan)

Spare copies ✓

SUBJECT.

Anamalai Road works

Submits Mr. Lean's report on the work done during the past ten months.

BACK PAPERS.

G.O.	No.	Department.	Date.
	1693D	d/16-10-97	✓
	1446D	- 22-9-97	✓
	889D	- 22-7-97	✓
	867D	- 19-7-97	✓
	3139C	- 9-7-97	✓
	611D	- 25-6-97	✓
	252D	- 17-5-97	✓
	2035C	- 8-4-97	✓
	1895C	- 1-4-97	✓
	1793C	- 29-3-97	✓
	A		
	846W	- 23-3-97	✓
	1541C	- 17-3-97	✓
	1448C	- 12-3-97	✓
	1110C	- 24-2-97	✓
	253W	- 26-1-97	✓
	3527W	- 9-12-96	✓
	4551C	- 2-12-96	✓
	3377W	- 24-11-96	✓
	4054C	- 12-11-96	✓
	3211W	- 10-11-96	✓
	3610C	- 20-10-96	✓
	1514D	- 8-10-96	✓
	1505D	- 7-10-96	✓
	1504D	- 7-10-96	✓
	1430D	- 28-9-96	✓
	1242D	- 8-9-96	✓

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Office of the Executive Engineer
on Special duty Anamalais
Camp Villony

No 361

5 WP

From

M. Loam Esq
Executive Engineer
on Special duty Anamalays

To

The Superintending Engineer
IV Circle
Coimbatore

Submit to SE
with [illegible]
[illegible]
26-10-97

Sir

With reference to your No 569 dated 19-10-97 received on 22nd October/97, I have the honor to submit a report of my work for the last 10 months in the form required

Year	month	Work done.
1896.	December 1-7	At Salem (8th December Received orders.)
	12th	left Coimbatore
	25th	Reached mount Stuart delayed by rain. The Forest Department do a large amount of work here so I decided to work here with a gang of men to fix working rates
1897	January 1-10	Traced 2 miles to Connect Col Michaels Road with the lowest Pass out of the valley Cut 22 chains Bridle Path and fixed working rates. I was informed by the Collector that a bandy road would ultimately be required entering the hills at Punachy or Villony & leave by Mt. Stuart so the work done in fixing rates would eventually be useful. I Consider that the new Country at Paralai with imported labour is manifestly not the place to fix rates but in adjacent & Similar Country at mount Stuart I could arrive at a fair approximation.
	10&21	At foot of Prince of Wales Ghat Punachy making enquiries about the labour calling for Rice with Set labour in the 1st place to clear Prince of Wales trace found that Considerable repairs were required to make it rideable. these have been done

1897.	January. 22 to 31	Exploring Mr Gass trace beyond the Estates at Punachy found it also lately obliterated by wild Elephants began Clearing it
	February. 3	to Paralai Exploring and tracing. Earthwork Cutting Bridle Path began on 18th
	March	Tracing & Superintending Bridle Path
	April	Ditto
	May.	Ditto
	June	Ditto last measurement of work on 24 June
	July August.	120 inches of rain fell when weather permitted I Selected route to Sirukundu. Tracing 2 miles of it. every hill and every open Space along the route from which the Country could be seen I have visited
	September 6 to 10	Superintending Engineer's Inspection. Maintenance & repairs to Bridle Path from Paralai put in hand by one gang. lockspitting extension to Sirukundu. Put in hand by another gang. after 6 days Consecutively in their sheds they came away. rain & leeches prevented work. In absence of any order or instructions I at the same time began making the Bridle Path to Paralai 10 ft wide through out 12 ft in all including the allowance of 2 ft drain, beginning from end of District Board road at foot of Ghat, by rebuilding the revetments out further to the limit of economy as to depth, thus any instructions that Came Subsequently giving a definite width to be maintained would in any Case be excavated to the extra width required. I intended also retracing such parts as are not Suitable for a bandy as opportunity occurred when rain interfered with work at Paralai. A Bridle Path now exists from the foot of the Ghat to Paralai a distance of 22 miles.

My only orders were to cut a Rough Bridle Path to Paralai in extension of Mr Gass trace this is only 5 Miles, but I have Completed it to the foot of the Ghat.

The gradient of my own trace is such that it can be Converted into a Bandy Road. To Convert

declined responsibility. This last bit avoids an unnecessary rise & fall in the existing Path, Actual Cost Rs. 100

E to F No work done in Estate except cutting a few trees to make passage easier
Mr Gass cleared this Path

F to G Mr Gass trace Cut 6 ft wide including side drains Serviceable as Bridle Path only

G to H My new trace in Continuation on a gradient that can be Converted to a Bandy Road if required. Total distance 41933 ft. E to H or just 8 miles Cost Rs. 1947-10-0
Cut 6 ft wide including drain
Department work

Preliminary expences Tracing	Rs.	1006-4-9
Building Inspection Sheds		140-4-0
Coolie huts & Cost of Iron sheets	Rs.	321-4-0
Boring & Cost of dynamite	Rs.	545-14-0
Carriage of Tools	Rs.	65-4-6
		2078-15-3

I to J Extension of Trace towards Sirukundu through Blocks taken up traced 2 miles this joins into my Bridle Trace 1/2 mile from Paralai this is proceeding.

Portion remaining to be done on information afforded me in Conversation with Mr Bradley that a Bandy Road would eventually be required through out the hills J to B to join Sirukundu to Ariakundi Pass this can be rapidly pushed on now working season has begun. it has been impossible to get Coolies to work in the rain in the last 3 months.

With reference to the Staff required I applied for an Overseer in my letter No 110 of 5th March/97 I believe the Superintending Engineer

		Convert the whole into a bandy Road the Piece between My Trace and the 8th mile of the Prince of Wales Ghat a distance of 9 Miles must be retraced and the Prince of Wales trace widened The gradient of the later is Suitable.

6 88

Abstract.	Reference See reference on the map.
A to B	Trace from Michaels' Road to Anaguudi Pass. Traced 97 chains, after Cutting 22 chs Put a maistry on to work Cut a Bridle Path 52 chains 6 ft wide 45 chains lockspitted Cost Rs. 216-8-0. Scarcity of water and fever prevented further work
C to D	Prince of Wales Ghat from end of District Road from foot of Ghat mostly 8 ft wide but only 4 ft for ½ mile where Revetment is built against perpendicular Sheet Rock. Cleared jungle the growth of 20 years 13 Revetments rebuilt 2 Bridges rebuilt Drain excavated Cost Rs. 484-11-11 Timber work for Bridges Rs. 621-2-0 Work done in September making this ghat 10 ft wide from foot. spent Rs. 300-0-0 Work this month anticipated Rs. 500-0-0 Prince of Wales Ghat, distance from foot including Parts now in use utilized for Bridle Path 7 miles 6 furlongs.
D to E	Connecting trace to a point on Right of way in Waterfall Estate Total distance 6665 ft. a gradient of 1 in 12 for Bridle Path only. 2785 ft have been cut 3 ft wide & joined in to existing Road & easily rideable. Remainder of distance only lockspitted to the point in Right of way as it would be expensive to cut requiring a lot of blasting having no order declined

Engineer has applied for, establishment

With Regard to opening up the Country I Request
an explanation of the Phrase as I understand
it, a Scientifically traced Path is Required -
through the land not yet applied for and its
Survey is Required for Publication to induce the
Public to come forward to take up estates.
Converting the present Bridle Path to Paralai
into a Bandy Road is not in my opinion yet
Required it would only benefit a few interested
persons who have already paid for their land
and requires 9 miles more tracing. To make a bandy
Road proper Estimates are Required made from
levels and Sections this would take the best
part of a working Season if required this should
put in hand at once and proper establish-
ment, entertained to take advantage of the
Cold Season execution of work is possible on
the Ghat most of the year rain is Comparatively
Slight Compared to Paralai and there are no -
leeches labour is Close. But now only is work
possible at Paralai from now till beginning
of June for pioneer work. This I can undertake
without, assistance if I am not bound to be
present when work under execution requires
laying out and Measuring up.

The Alignment of the main Road I was
informed in the Government orders Received
on 8th December/96 would be Communicated to me
by the Collector and his Forest Officer in
reply to my request for instructions the Collector
in his letter, dated 6th January deferred this
till after June when the land auctions
would take place the working Season
has begun, and in my letter No $\frac{323}{15-9-97}$
I have, again applied for instructions.

Meanw

Meanwhile the extension beyond Paralai will proceed governed purely by Engineering Considerations the best the cheapest and most direct route with the least Bridging ~~the~~ to serve the Bulk of the most likely land beyond Sirukundu and toward mount Stuart to join into my trace already done to the lowest pass on the watershed on that Side whether this is Correct or whether Certain Blocks only must be Served I have yet to be informed.

With reference to para 4 of the above quoted reference I am unable to understand it. In the light of present information it is said my conduct on this road work is Considered very unsatisfactory.

I have the honour to point out that the same information exists about my work as regards the work of every Member of the Department from the periodical Departmental forms and Statistics which have been duly forwarded. further my work has been twice Specially inspected by you sir and favourably Commented on in your last report. My orders were to make a rough Bridle Path to Paralai in Continuation of Mr Gass trace. I have exceeded them Considerably by Completing a Bridle Path to the foot of the Ghat and this has taken me alone unaided the whole of last working Season. I have ~~Caution~~ Cautiously proceeded with very necessary work and liberally interpreted the orders I received but it has been my experience in 11 years of Service that it is not Safe to Speculate on the manifest intentions of Government but to Confine oneself to orders.

I would draw attention to the Conditions of ork here it was an entirely unknown Country no Government Officer however been to Paralay and none beyond no information Could be obtained & map about it only with magnetic Compass Can one escape being lost nothing Can be seen in the dense forest Of three maistries have had 2 were incapacitated by fever and my writer and lascars have Suffered much from the Same Cause. I have had no assistance from the regular Staff of the Department in the District in procuring labour One Sub overseer appointed to serve under me resigned rather than work in these hills.

The Forest department have discouraged all my attempts to obtain hill men the only suitable labour for jungle Cutting & tracing it interferes no doubt with their petty revenue. but ~~[illegible]~~ trebles the cost of this particular work

The whole work was done with money advanced at my own risk and that this risk was heavy is proved by the fact that Mr Windle's Agent now opening lands at Paralai has filed suits against every one of his original Contractors and obtained decrees for money advanced. I have had to work with similar men by the exercise of great Caution only I have Committed Government to no loss.

I request that I may be furnished with the Specific accusations I have now to meet & information by whom they are made.

I have already replied to Complaints made by certain unofficial persons as to the delay up to February whom the immediate execution of my orders would have benifited. I maintain it was necessary to fix working rates and not to proceed to work regardless of expense. further the work executed whilst these were being ascertained would ultimately be useful. however it may have been an error of judgment on my part this is not a famine work and not emergent I understood work should proc in a scientific & professional manner.

I

I proceeded to Paralai on 3rd February, began tracing on 18th Cutting the Bridle Path was Commenced at both ends Simultaniously and finished on 24th June.

The Contract was undertaken by Mr. Windles Agent this was a guarantee I imagine that it would be done as soon as possible as he was urgently wanting to use it and I had to be present to measure up every 8 days & make payments & between whiles as well to see that the provisions of the Specification were adhered to. In July & August the weather did not permit me to Camp in tents beyond Paralai but I made many long excursions to prospect, Cooly work was out of the question in September also. In this month I sent two gangs to Paralai but they Came away on account of rain I organised meanwhile the rough repairs to the Thuis Ghat.

I beg for favourable Considerations of the Conditions under which the work had to be Carried out the reports & Complaints from outside have Caused me much anxious worry. the Standard fixed by this Section of the Public arrived at by lifelong experience in opening Virgin forest with little knowledge probably of any thing else is not a fair one by which to judge an Engineer & an official trammelled by Department traditions.

I have endeavoured to do my duty as I saw it.

853.M
28 OCT. 97
1.

I have the honor to be
Sir
Your most Obedient Servant.
M Loam
26.10.97.
Executive Engineer

OW 2.1
10888/97

4P

No. 590/W

Supdg. Engineer's Office W Circle
Coimbatore 30th October 1897.

From
J. Hannan Esq.
Superintending Engineer, W. Circle.

To
The Chief Engineer,
P.W.D.

Enclosures. 2.
1 Copy of Mr. Loam's report.
1 Tracing.

Sir,

With reference to your Memorandum No. 1693 D of 16 October 1897, I have the honor to enclose ~~copy of~~ in original Mr. Loam's report therein called for.

With reference to the para 5 of the Memo: I beg to state that I inspected Mr. Loam's work in February 1897 and again in the following September and the results of my inspections are given in my letters Nos. $\frac{148}{W}$ and $\frac{523}{W}$ d/13th March and 27th September 1897, respectively.

I have the honor to be
Sir
Your most obdt. servant
J Hannan
Supdg. Engineer W. Circle.

Public Works (1897) Department.

CURRENT No. 10689

Order

From The Supg. Engineer, 4th Circle.

No. 579/W.

Dated 26th October 1897

Received 27.10.97

Enclosures One

Spare copies ✓

SUBJECT.

Road up to the Auliar river at Vannanthorai on the Anamalais.

Reports on the instructions issued with regard to the repairs of

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 579/W
Supdg. Engineer's office 4th Circle
Coimbatore 26th October 1897.

From,
J. Hannan Esqr.
Superintending Engineer 4th Circle.

To,
The Chief Engineer
P. W. Department.

Enclo: 1.
Copy of letter from Mr. Loane

Sir,

With reference to paras 1, 2 & 3 of your urgent memo No. 1446 D of 22nd September 1897 I have the honor to enclose copy of a report from Mr. Loane.

I have written to the President of the District Board requesting him to have the road up to the Auliar river at Vannanthorai repaired. From Vannanthorai to the foot of the ghât there is a rideable bridle track, this is all that is required at present. I have requested Mr. Loane to keep this track open.

I have requested the Executive Engineer Coimbatore

Coimbatore to take down the suspension foot bridge at Kullar and to dispatch it to Vannanthorai where it will be taken over by Mr. Loam for erection across the river at that place.

I have the honor to be,
Sir,
Your most obt: Servant.
Hanney
Supgn Engineer 4th Circle.

H.

Letter No. 337 dated 1st October 1897 from the Executive Engineer on Special duty Anamalais to the Superintending Engineer Fourth Circle.

With reference to your endorsement No. 522/m dated 25th on memo No. 1446. P. dated 2nd September 1897 it is stated in para 1 of the memo: that the Road from Angalakurchi to Muttatoray is very bad. I have the honor to remark that this Route is merely a village cattle track and not recognised nor ever made as a road but Muttatorai is a recognised ford and a ferry boat is kept here in the monsoon it is a sandy Crossing the river is wider and less swift at this point.

From Muttatorai to the foot of the ghat the Cattle path is very narrow and much scoured out it lies through wet cultivation and a valuable piece of land would be occupied by a road if this route were selected. Carts cannot use this Crossing at all, as there is no Road from the river to the ghat. Whereas the road from Angalakurchi to Vannanthoray on the same river Aliar half a mile above Muttithoray is part of the District Board Road and mile stones have been fixed along it up to the 12th from Pollachy here also at Vannanthorey is a tiled shed belonging to the Forest Department.

From

From the 12th Mile stone to the river is 6810 feet. thus 13 miles may be considered in charge of the district Board. Span of river 300 feet this is capable of reduction by a subsidiary bridge. Rock foundations are available for the main bridge.

On the other side of the river to the foot of the ghat is a much worn cart tract, entirely through dry cultivation and presumably also under control of the district Board. the length is 3900 feet.

Carts travel across the Aliar river to fetch firewood and bamboos by the Vannanthoray route when the river is low, but the river is too swift here for a ferry boat to be used when in flood and crossing is impossible close to the foot of the ghat at 2400 feet from the big river, another Bridge is required over a small tributary of the Aliar. This drains the Villoni valley only of small extent and fordable at most times a small bridge similar to those I have built on the ghat but somewhat larger is all that need be built if considered necessary.

The distance from Angola Kurchi to foot of Ghat by Mullithoray and Vannanthoray route would be about the same the road by Vannanthoray is shown on the Taluq map as a district Board road, the other is not.

Refere

Reference to paras 2 and 3 of above letter, I request you will take steps to have the road from the 13th Mile to the foot of Ghat transferred from the District Board and apply to them for any plans or surveys shewing the width of land under their control along this road. It is also to be considered if they should give a contribution from their funds to afford me information of the details of the iron work of the bridge that is advisable and also to obtain sheets Nos. 11-12 and 13 of the Anamalai Reserve Forest maps to enable me to take out the drainage area of the Aliar river.

I have applied to the Executive Engineer Coimbatore Division for a level.

Sections will be submitted shortly.

(True copy)

J Hunnay
Supg Engineer, 4th Circle