

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No.	450	<u>Press</u> <u>Mis.</u>
357-358. Dated	18 - 2 -	1868.

Not to be folded or roughly handled

450

*Proceedings of the Madras Government, Revenue Department,
18th February 1868.*

No. 357. Read the following Proceedings of the Madras Government in the
Public Works Department:—

Approving of the route recommended by the
Consulting Engineer for the extension of the
Great Southern of India Railway from Trichi-
nopoly to Madura, via Caroor and Dindigul,
and of the concentration of the Survey parties
accordingly. (Here enter 14th February 1868, No. 520.)

No. 358. ORDER THEREON, 18th February 1868, No. 450.

Miscellaneous.

Communicated to the Revenue Board.

(True Extract.)

(Signed) F. BRANDT,
Under Secretary to Government.

To the Board of Revenue, with Proceedings Public Works Department, No. 520.

Exd. S. T. Augustin.

*Proceedings of the Madras Government, Public Works Department,
14th February 1863.*

Read the following papers :—

No. 348. From the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 15th January 1868, No. 21.

1. Referring to the Order of Government, under date the 25th October last, No. 3,334, I have the honor to submit for orders a letter* received from the Agent of the Great Southern of India Railway, accompanying which is a report† from the Chief Engineer of the Company, upon the comparative merits of the alternative routes between Madura and the main line of the Great Southern. A letter‡ from Captain Lindsay on the same subject is also submitted.

* No. 2,481, dated 9th January 1868.

† Dated 14th November 1867.

‡ Dated 10th January 1868.

2. Adverting to the last part of paragraph 3 of the Order above quoted, I have the honor to state that I have subsequently received from the Collectors of Tanjore, Trichinopoly, Coimbatore, Madura, and Tinnevelly, and from the Superintending Engineers of the 7th and 8th Divisions, reports, more or less full, upon the same subject, with expressions of their opinions upon the comparative merits of the two lines. The Superintending Engineer of the 6th Division alone stated his inability, from want of knowledge, to offer an opinion. I regret that I cannot now lay these reports before Government, as they are with Captain Lindsay, who is at present engaged in examining the two routes. The balance of opinion is, however, decidedly in favor of the route *via* Caroor and Dindigul, the Collectors of Tinnevelly and Tanjore being in a minority of two out of seven in preferring the route *via* Trichinopoly.

3. Mr. Dibblee's report, which is herewith submitted, is strongly in favor of the Caroor line; and I beg to support Captain Lindsay's recommendation that both of the survey parties now sanctioned should be employed in making a trial survey of that route, leaving the Trichinopoly route to be afterwards surveyed if thought necessary.

From the Agent of the Great Southern of India Railway, to the Consulting Engineer for Railways, dated Negapatam, 9th January 1868, No. 2,481.

1. In sending forward to me G. O., No. 1,882, of the 24th June last, ordering that a cursory examination should, in the first instance, be made of the country along the alternative lines from Caroor and Trichinopoly to Madura, Colonel Anderson requested me to furnish him with a

Letter No. 76, 28th June.

monthly report of operations, with the route followed by the Engineers so described as to allow of his tracing it on the Trigonometrical Survey sheets. Sanction was at the same time accorded for the employment of the required working party. Colonel Anderson verbally informed me that he thought the work could be performed at the rate of a mile a day.

2. On the 30th September, acting under instructions from my Directors, I asked you if Government could dispense with this cursory examination, and, upon the information in their possession, at once decide upon the route to be adopted; but Government considered the examination of the country by the Railway Engineers in every way desirable.

3. I at once took steps to push forward the work on each route simultaneously, so that both lines might be finished at the same time, and no delay be incurred in arriving at a decision, as I

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expected by the time the examination was completed, the returns of existing road traffic would also be available.

4. I learn, however, from Captain Lindsay to-day, that it is not quite clear Government require more than a report from some officer who has ridden over both lines of road. The Chief Engineer has already done this, and I attach copy of his remarks. The Road Traffic Returns, which I have received up to date, preponderate so much in favor of the Trichinopoly route, that I felt desirous of testing the traffic a little further before sending forward the report. The traffic still continues greater on the Trichinopoly road, and I will forward a tabular statement of this and of the traffic on the other road in a day or two to you. In order, however, that Government may be able to say at once whether they consider the information given in Mr. Dibblee's report will suffice, and that they wish the working parties which have been started on both roads to stop further examination of the country, I shall feel obliged by your laying these papers before them. I shall be glad to hear that this is so, as it will save delay in arriving at the desired decision.

From the Chief Engineer, to the Agent of the Great Southern of India Railway, dated Trichinopoly, 14th November 1867.

1. In continuation of my No. 4,977, I now have the pleasure to forward a report as the result of my reconnoissance of the two routes proposed to be surveyed between our present line and Madura.

2. The present arrangement of my staff has prevented my undertaking the survey as I had hoped to do, and as was intended when the sanction of Government was applied for and obtained. I have, therefore, thought it expedient, under the circumstances, to go over the ground personally to examine the features of the country and form an idea of the probable engineering difficulties, and also to collect from the local authorities some information as to the character of the traffic to be expected, with a view to a comparison of the relative advantages of the two alternative routes; and I have now arranged to commence the survey myself, with the assistance of some Surveyors whose services are now available pending the release of the Assistant Engineers from their present duties, when properly organized parties shall take up the work.

3. From Trichinopoly to Madura direct, passing the villages of Vualimally (in Puddocottah) Thoveramcoorchy, Cottamputti, and Mailoor. A good line may be obtained without departing from the proximity of the public road, except in a few places; the first nine miles through the Trichinopoly District the country is level, and but little drainage is to be provided for, thence the line will pass for nearly twenty miles through the Puddocottah territory, over a country more undulating with a good many tanks and a few nullahs; favorable gradients can be obtained without much earth-work; where the road leaves the Puddocottah territory it runs over a more broken country, a slight detour, however, to the eastward would overcome most of the difficulties; near Thoveramcoorchy, thirty-eight miles from Trichinopoly, it will be necessary to cross the river "Vellaur," a considerable stream, and pass over the summit, dividing the water-shed of that river and the "Palaur" which flows in a south-easterly direction; the country is here very rough, and I fear a considerable expenditure in earth and rock excavation will be necessary to obtain favorable gradients. After leaving the village of Cottamputti (43 miles distant from the town of Madura) the whole country is exceedingly flat and level, and no difficulty is to be anticipated beyond that of providing for the drainage into and from the many tanks through which the line must pass, the total distance is 81 miles.

4. From Madura over Dindigul to Caroor the line will pass Sholavandan, Ammianaikanoor, and Dindigul to Caroor. The river "Vigay" must be passed at some place favorable for the foundation of a bridge, and the direction of the stream: this river is somewhat larger than the Amravutty at Caroor. From the place where the line would leave the immediate neighbourhood of the "Vigay," until it arrives at the summit of water-shed to the streams running north and south, which is within seven miles of Dindigul and 31 of Madura, the ground rises gradually and very regularly, easy gradients may be obtained without much expense in earth-work; the bridges and culverts to provide for the drainage will also be small, as the valley is narrow with hills on either

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side, limiting the area which catches the rain-fall. From the summit to Dindigul a detour to the west from the present road will be advantageous.

5. The summit (highest level to be crossed on the route) is not by any means so abrupt nor is it in such a rough and broken country as on the other line.

6. From Dindigul to Caroor the country along the present road is undulating, without any steep inclinations, so that a line not at all unfavorable can be found near to the road which I passed through, and I am of opinion that much less expensive work will be necessary by following a course nearer to the centre of the valley leading into the river Amravutty, from the hills near to Dindigul, the total distance is 83 miles.

7. Granite and gneiss crop out at the surface generally all along both routes, so that good stone for masonry will be procurable within short distances; kunker lime-stone also appears to be present generally.

8. In comparing the two routes from an engineering point of view, I am inclined to believe that the line over Dindigul can be perhaps more cheaply constructed, as regards earth-work and masonry, than that between Trichinopoly and Madura; at the same time, in absence of concise data for an estimate, my examination of the country leads me to the opinion, that on neither route will the cost exceed that of the Erode Extension, taken as a whole.

9. I now propose to consider the relative advantages offered by the alternate lines, as to the nature and comparative amount of traffic to be expected on each.

10. With this view I have made enquiries of all the local authorities, and I have obtained some notes and valuable information which Mr. Arbuthnott, the Collector of Madura, has kindly given me, with regard to the number of inhabitants in the vicinity of the proposed lines, and the nature of articles of consumption and export in each district. The Sub-Collector of Dindigul has also kindly afforded me much information as to the capabilities of the division under his charge.

11. The traffic from and through Madura towards our present line consist of passengers, cotton, cotton thread, manufactured cloth, hides, iron, timber, firewood, charcoal, rice and paddy, dry grains, seeds for oil, jaggery, chillies and spices, arecanuts, tobacco, and miscellaneous articles of Native and European manufacture.

12. The course which this traffic now takes is in a greater proportion by the direct road to Trichinopoly. This I think is to be accounted for by this road being in a direct line to Madras rather than because Trichinopoly is the destination of the traffic, as the principal articles come from or go to Madras, such as cotton, cotton thread, clothes of Native and English manufacture, and iron.

13. From the above I am induced to believe that the carriage of the through traffic which now goes by the Trichinopoly road will be secured to the Railway as surely by one route as by the other, and the majority of it, that with Madras, can be carried more directly and cheaply in the line over Dindigul and Caroor.

14. The carriage of rice and paddy on the other hand, which in seasons of scarcity at Madura is very considerable from the Trichinopoly and Tanjore Districts, might be somewhat better served by the route from Trichinopoly. The Madura District, however, except in very dry seasons, I understand, produces grain enough for its own consumption, and if any loss arises from the distance being too great from Tanjore, rice can be largely supplied from the neighbourhood of Caroor.

15. The through traffic now passing Dindigul and its vicinity goes from the Madura and Tinnevely Districts up to Palghat and the Madras Railway. The arecanuts, which are universally used by the poorer classes of the people, the chillies and spices, and timber for building, come from Palghat; cotton cloth being chiefly sent in return. A large number of passengers also are continually passing on their way from the Western Coast to perform pilgrimages to the temples of Madura and the holy places of Ramiseram. It is to be doubted whether this traffic would be easily diverted to adopt the longer route over Trichinopoly.

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16. I have deduced some statistics of traffics from the returns of tolls collected at the entrances to Trichinopoly by the Dindigul and Madura roads, those at the latter appear to represent an average of 100 loaded bandies daily entering (in one direction) the municipal limits, and I have ascertained by more particular returns taken lately for the purpose, that more than half the traffic is through, i. e., from the vicinity of Madura and beyond it, the remainder would therefore represent local traffic.

17. The returns of Trichinopoly traffic from the toll bar at the road from Dindigul, taken at the same time, give an average of a little more than fifty loaded bandies (in one direction) daily, this would appear to show that the traffic from the country in the direction of Dindigul would compensate for the loss of the local traffic on the Madura road.

18. At Dindigul the tolls of the Municipality are farmed by a Contractor for a sum of Rupees 150 per mensem, this would give an average of forty loaded bandies per day entering the town without allowing for the Contractor's profit. In addition to this the Tahsildar of the Dindigul talook informs me that more than an equal amount of traffic passes through Kunnevaudy (a village about 10 miles to the westward of Dindigul); and returns of passing bandies taken by myself at Ammianaikanoor, before the roads divide for Dindigul and Kunnevaudy, prove the correctness of the statement. This represents the through traffic which I suppose cannot be easily diverted from its present channel.

19. From these data it would appear that the local traffic to be expected on the Dindigul route, added to the through traffic not to be diverted from it, would very much exceed the amount of local traffic on the Trichinopoly and Madura line, while we may reasonably assume that the through traffic on the latter route will be diverted to the other.

20. An argument in favor of the route from Trichinopoly, which I have considered, is that this being the shortest route from Tanjore District to Tuticorin, the Railway will thereby be better enabled to compete with the carriage by sea of the large quantities of grain which are now exported to Ceylon from the ports of Tanjore; I find however, a comparison of the relative costs of sea and land carriage even by the shortest route, shows that very little can be expected in this respect. The ordinary charge for freight by dhoney from Negapatam to Colombo is now about Rupees 6 per ton. Whereas the carriage by rail from Tanjore to Tuticorin, 217 miles, at present rates (1 anna per ton per mile), equals Rupees 13-9-0, to which is to be added the cost of shipping from Tuticorin.

21. From the population returns which I have seen of the villages on both routes, it appears that there are about 100* per cent. more inhabitants on and in the neighbourhood of the western, than of the eastern line, and more local traffic may be expected for this reason alone.

* Chief Engineer's letter No. 5,121, of 18th November 1867.

22. I am informed that there is a large extent of soil in the Pulney talook, to the west of Dindigul, which is capable of producing cotton. If facilities are offered for importing food for the ryots, and exporting the produce of the cotton-growing country, the cultivation of it would naturally be materially increased. Tobacco also is largely cultivated in the Dindigul talook, and as all of it is exported, the cultivation will doubtless be increased for the same reason. On the eastern road I have not been able to ascertain that any produce is grown for exportation, except oil seeds.

23. Any advantages that may arise from the proximity to the Cumbum valley, which is now a well cultivated and productive district, and is likely to be so much improved by the great irrigation project (Perriyar project) proposed to be carried out on the hills at the head of it, will be gained by the western line.

24. In conclusion, I would briefly sum up my arguments in favor of the western route, and my reasons for recommending its adoption in preference to that from Trichinopoly.

25. It secures the through traffic of both routes and the local traffic on the western, losing only the local traffic now passing by the eastern route, this would not be affected by the other.

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It passes through a country producing large quantities of cotton and tobacco, the cultivation of which causes traffic both in exporting the produce and importing food for producers, and it is a traffic likely to be developed more than any other by increased facilities of transport. The traffic of Madura District being principally with Madras and Palghat, will be better served and more surely developed by the more direct and cheaper transit through the western route. The rich Cumbum and Pulney valleys are brought within easy communication with seaports, rather than the poorest part of Trichinopoly District and a portion of the Pudukottah territory. If the eastern route is adopted it will be necessary to build a long and expensive bandy road, to connect the Dindigul and neighbouring districts with the Railway system; this expense would be avoided by adopting the western line, only a few feeders being required, the road as now built from Trichinopoly to Madura being amply sufficient for local purposes in that part of the country.

26. Holding these views, I propose first to commence the survey from Caroor to Madura, and if the Government do not feel that there are sufficient grounds for adopting it in preference to the other, the survey of second route can be subsequently undertaken.

From the Acting Deputy Consulting Engineer for Railways, to the Consulting Engineer for Railways, dated Trichinopoly, 10th January 1868.

1. I have the honor to state that I find that a "cursory examination" of the land between Trichinopoly and Madura, and Caroor and Madura, such as was ordered in G. O. No. 1,882 of 24th June 1867, and again in G. O. of 23th October, was carried out, and a report forwarded to the Agent by the Chief Engineer on 13th November 1867.

2. I thought at first that by some mistake the Chief Engineer's letter had been omitted from the file of correspondence I brought with me, but, when at Negapatam yesterday, Mr. Betts informed me that he had not sent you the report, as he was waiting for some statistics of traffic which have only just been received, I consider that it would be better to employ both the Survey parties now sanctioned on the Caroor and Madura route (Mr. Dibblee's Report being strongly in favor of this line), and afterwards to commence the trial survey of the Trichinopoly and Madura route if it is considered necessary. This arrangement can make no difference in the time of completion of both surveys, and may save the Company Rupees 3,747, the probable cost of the Trichinopoly Survey.

3. If you concur in this, I would suggest your sending orders for the concentration of the Survey parties on the Caroor line.

No. 349. From the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 20th January 1868, No. 23.

1. I have the honor, with reference to my letter of the 15th instant, No. 21, to submit for the consideration of Government a second letter* which

* No. 2,484, dated 13th January 1868. has reached me from the Agent of the Great Southern of India Railway, on the subject of the alternative routes between Madura and the main line. With this letter Mr. Betts submits abstracts of traffic returns which have been lately taken along the two routes; and after drawing a comparison between the respective figures, states his opinion that the eastern route would be the best to take, both for the country and for the Railway Company. He then cites several arguments in support of that opinion, and solicits an early decision on the part of Government as to the route to be adopted, mentioning that his Directors are most desirous to take active steps towards commencing the southern extension, and that the present would be a most favorable time to raise in the English market the necessary capital.

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2. The traffic abstracts submitted by the Agent go to show that the wheeled traffic along the western, or Caroor route, amounts at present to hardly the half of what passes along the eastern, or Trichinopoly route. The comparison is, however, hardly a fair one; for while there is a good road between Madura and Trichinopoly, along the greater part of the western line there is nothing deserving the name. It will also be observed that the whole traffic from the Salem District has been excluded, on the ground that it would probably follow whichever line is made; but a glance at the map will show that, while the Salem traffic would naturally prefer the Caroor route, the greater part of the Trichinopoly traffic might with equal justice be excluded from the comparison; for, while it would naturally take the Trichinopoly route, there can be little doubt, but that it also would be attracted to the Railway, whether that were taken from Caroor or from Trichinopoly.

* Paragraph 7.

3. Besides the Salem traffic, Mr. Betts also states* his opinion that the Coimbatore traffic would travel by Trichinopoly as readily as by Caroor, but that the greater portion of the Tanjore trade would be lost to the Railway if taken by the latter town. The map, however, seems to show clearly that it would be as difficult to induce the Coimbatore traffic to go by Trichinopoly, as to induce the Tanjore traffic to go by Caroor; and Mr. Grant, the Collector of Coimbatore, with whom I have had frequent communication on the subject, assures me that if Trichinopoly be the starting point of the extension, little or none of the large trade between his district and the south will be attracted to the Railway.

4. In paragraph 6 of his letter, Mr. Betts remarks that the eastern route would not only cost less in construction, owing to a shorter carriage of permanent-way materials, but, from the same cause, the after-working expenses would be less. I do not think that great weight should be allowed to this argument. The Chief Engineer has reported that so far as he can now form an estimate, the cost of the two lines will be as nearly equal as possible; and it should be borne in mind that in either case a large part of the permanent-way material, fuel, &c., will be landed at Tuticorin, whence the cost for carriage will be the same whichever line is chosen.

5. In paragraph 11 of his letter, Mr. Betts alludes to the fact of the population along the western route being greater than that along the eastern route, and though he does not seem to attach much importance to it, I have no hesitation in saying that the density of the population in any district is in most cases a far surer guide in estimating the probable prospects of an Indian Railway than any return of the actual traffic. This principle was lately laid down by the Government of India in their Resolution,* dated the 3rd

* *Vide* G. O., 8th January 1868, No. 61.

December last, No. 1,050 R.

6. In a question like the present, great weight should, I think, be allowed to the opinions of Revenue Officers who have long resided in the districts concerned, and who have studied the tendencies of the chief currents of trade. In this instance opinions in favor of the Caroor route have been placed on record by two Collectors of Madura, Messrs. Levinge and Arbuthnott, by two Collectors of Trichinopoly, Messrs. Pochin and Agnew, by Mr. Grant, the Collector of Coimba-

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tore, and by Mr. Silver, the late Collector of Tinnevely. Messrs. Morris and Puckle, the present Collectors of Tanjore and Tinnevely, are, so far as I know, the only gentlemen who have recorded their opinions in favor of the Trichinopoly route.

7. I regret much that I cannot at present lay before Government the letters in which these opinions are embodied. Captain Lindsay is now employed in examining the two lines; and as I had no reason to think that the question would come up immediately, I allowed him to take the papers with him for reference.

8. In spite of what is urged by the Agent in his letter, now forwarded, I must adhere to the recommendation made in my previous letter, viz., that both of the survey parties now sanctioned should be employed in making a trial survey of the Caroor line, leaving the eastern line to be afterwards surveyed, if thought necessary.

From the Agent to the Great Southern of India Railway, to the Consulting Engineer for Railways, dated Negapatam, 13th January 1868, No. 2,484.

1. I have the honor to attach hereto statements showing the result of the road traffic returns on the eastern and western routes. The former representing the traffic passing through or between Trichinopoly and Madura, and the latter traffic between Caroor and Madura and places west thereof.

2. The Collector of Madura having furnished the road traffic-takers with written authority to obtain the required information, I stationed three parties on the roads—one at Dindigul, another at Cottamputty, and the third at Madura, the last named at a point which commanded the traffic entering to and passing from Madura and Periacolum, Pulney, &c.

3. The result shows (after excluding traffic from the Salem District) on the eastern or Trichinopoly route a daily average of 143 loaded goods bandies; and on the western or Caroor route a daily average of 67 loaded goods bandies.

4. On the western route, the principal items of traffic are salt (equal to 40 per cent.), jaggery and grain, upwards or to the north; and on the down or southward journey, paddy and rice (equal to 32 per cent.), fruit and vegetables, grain, salt, and tobacco.

5. On the eastern route the upward traffic principally consists of jaggery (equal to 41 per cent.), salt, tamarind, and grain. The chief items of the downward traffic being paddy and rice (equal to 83 per cent.), oil, charcoal, seeds, betel, tamarind, and timber.

6. Looking at this result, I am inclined to endorse the opinion of the Collectors of Tanjore and Tinnevely, that the eastern route would be the best to take both for the country and for the Railway Company. Sir Charles Trevelyan also preferred this route after personally inspecting the district. The Chief Engineer reports, that so far as engineering questions are concerned, the cost of constructing either route would be about the same, and under the mileage expenditure upon the Erode extension. The eastern route would have the advantage of being two miles shorter; of costing £100 per mile less in the carriage of permanent-way materials, and after it was made, of costing less in locomotive working expenses. If the line is taken from Caroor, all (excepting trifling) repairs of rolling stock would necessitate an extra haulage of the vehicles of 46 miles, and fuel would be Rupees 3 per ton dearer to cover delivery at that station.

7. I am of opinion that the Salem and Coimbatore traffic would travel by the Trichinopoly as readily as by the Caroor route, but that we should lose the greater portion of the Tanjore district traffic if it had to be carried *via* Caroor. The importance of giving a cheap access to the abundant rice fields of Tanjore is an important point for the welfare of the Southern District. I anticipate too that the eastern route would develop a large trade from Negapatam in timber and arecanuts. With the junction at Caroor we could get both these items of traffic from the Western Coast, but instead of utilizing 82 miles of the existing line, we should then only obtain toll for 41 miles, Erode to Caroor.

8. In the traffic returns for the western route, I have included the Periacolum and Madura traffic, but I question if any portion of that traffic would come upon the line supposing it was

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taken *via* Dindigul; experience has proved how difficult it is to induce merchants to tranship their goods for short distances, and Mr. Grant in his report forcibly calls attention to this point in the case of the Madras Railway at Palghat, &c.

9. The copies of the reports which you sent me do not any of them contain data upon which a decision could be safely arrived at. The number of bandies passing through a toll gate, or along a road, daily, is no safe guide to take in judging of the amount of traffic likely to fall upon a railway. We require to know the places from and to which the bandies are travelling. Many bandies are engaged for distances of 6, 8 or 10 miles only, and this traffic would never come upon the railway. You are aware that our rule is not to charge for a less distance than twelve miles, and when goods have to be carted three or four miles to reach a station, and after conveyance by railway have again to take to the road for two or three miles to reach the consignee, it is not to be expected that traffic for distances of less than 16 miles will leave the road. In the traffic returns I have sent you, all bandies travelling a less distance than 16 miles have been excluded.

10. During a portion of the year the Tanjore ports are practically closed so far as the Ceylon rice trade is concerned. At such times trade between Tuticorin and Colombo is carried on without hindrance, and we might secure a large through carriage by quoting a cheap rate; the less mileage we should have to carry the produce, the cheaper would be the rate.

11. Returns furnished by the Collector of Madura show that the population within five miles on either side the western road exceeds that on the eastern road so far as the Madura District is concerned. I have not yet seen the returns for the Coimbatore and Trichinopoly Districts. I do not think we should lose much "long" traffic by going away from this; short distance travellers prefer walking by road as the number of passenger trains are so few. When our lowest class fare was at three pice per mile, for instance, we carried only one or two passengers daily between Negapatam and Sickle, and between Trivalore and Kulikerry, &c., and yet the Negapatam talook has a greater population to the square-mile than any other in the district.

12. Will you please lay these papers before Government, and solicit a decision upon the route to be adopted. To continue taking an account of the road traffic would not, I think, show any different result; so far as I can learn the number of bandies passing along the eastern road this year does not amount to the number which travelled last year, as then the grain crops had failed. It may be that this season also is to some extent a poor one in the southern parts of the Presidency, but this fact would affect both routes, as paddy and rice is the principal item of down traffic on each road.

13. Two other points remain for consideration, that alluded to in Mr. Puckle's report relative to placing Trichinopoly in direct communication with the south, and thereby saving the cost of the Military depôt at Palameottah, and the other, the probability hereafter of a coast line cutting through Trichinopoly to the south in the event of the western route being adopted.

14. My Directors are most desirous to take active steps towards commencing the southern section, and the present would be a most favorable time to raise in the English market the capital required for constructing the line.

Western route.

Average number of loaded Goods Bandies per day.

Between Madura and Palghat and Coimbatore	...	...	3.45
Dindigul	...	...	10.22
Pulney	...	...	10.63
Periacolum	...	...	7.40
Places in Madura District having over sixteen miles carriage.	...	...	16.72
			48.42
Between Caroor and Dindigul—			
Northwards	...	...	2.02
Southwards	...	...	4.40
			6.42
Between Trichinopoly and Dindigul—			
Northwards	...	...	4.42
Southwards	...	...	8.04
			12.46
			67.30

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Eastern route.

Average number of loaded Goods Bandies per day.

Madura to Trichinopoly <i>via</i> Cottamputty	...	...	7.93
Do. do. <i>via</i> Dindigul	...	...	1.77
			9.70
Trichinopoly to Madura <i>via</i> Cottamputty	...	...	46.09
Do. do. <i>via</i> Dindigul	...	...	1.69
			47.78
			57.48
Madura and places south of Cottamputty to Trichinopoly and Tanjore Districts	...	...	9.09
Tanjore District to Madura District	...	...	23.08
Trichinopoly District to Madura District	...	...	35.39
Places in Madura District having over sixteen miles carriage	...	...	18.11
			85.67
			143.15

The Salem District traffic has been excluded from this list, as such traffic will most probably follow whichever line is made.

Traffic passing over the road leading between Sonveramcoorchy and Madura (which would be served by the eastern route) is not included herein, no account of it having been taken.

One hundred and five bandies have been excluded from the statement, as the names of the villages given cannot be traced on the map, and it is not known under which headings they should be placed.

(Signed) W. S. BETTS,
Agent and Traffic Manager.

13th January 1868.

No. 350.

ORDER THEREON, 14th February 1868, No. 520.

RAILWAY, No. 29.

1. These papers relate to the selection of a route for the proposed branch of the Great Southern of India Railway to Tuticorin *via* Madura, it not having yet been decided whether it will be more advantageous to take the line from Trichinopoly to Madura, or from Caroor *via* Dindigul to Madura.

2. The Chief Engineer of the Company having gone over the ground along both routes, states that there are no engineering difficulties of any magnitude on either, but that on the eastern line there is the Vellaur river to be bridged and a rather abrupt water-shed to be worked across, whereas, on the western line no river of any size is to be encountered, and the country is every where easy.

3. From the returns of traffic which he has been able to obtain Mr. Dibblee shows that the traffic on the two lines of road is at present much in favor of the eastern route; but this he thinks is due to Trichinopoly being on a direct line of well made road between Madura and Madras, and to large quantities of paddy from the irrigated districts of Tanjore and Trichinopoly being transported to the South in consequence of the late bad season in Madura. He believes that this latter traffic, or the carriage of grain to Tuticorin for shipment to Ceylon cannot be relied on, and that the through traffic being certain to come upon the Railway, by which—

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ever route the line may be made, it will be better to look to the great local traffic of the country between Madura and Caroor *via* Dindigul, and to the development which that traffic is capable of being made to attain if the rail be laid in that direction.

4. The trade of Madura and the districts southward is chiefly with Salem and Coimbatore as far west as Palghat, and this trade, as well as that of the country around the base of the Pulney hills will certainly, in Mr. Dibblee's opinion, be attracted to the rail if, by adopting the western route, it open out the most direct communication between the south and the Madras Railway at Erode, and intercept the local cross traffic which now finds its way towards Dindigul and Madura by the road leading from those places towards Coimbatore by Pulney. Mr. Dibblee thinks these advantages will be lost by selecting the eastern route, and he shows, moreover, that the population on the western route being twice as dense as on the eastern, a proportionately greater amount of traffic is likely to be created on the former than on the latter line, and he accordingly recommends the selection of the western route.

5. The Agent and Manager however differs from the Chief Engineer, and, basing his opinion principally on fuller returns of traffic than were available to Mr. Dibblee, he would adopt the eastern route from Trichinopoly to Madura direct, where, he shows, that the present movement of produce is nearly 100 per cent. in excess of that by the western route from Caroor *via* Dindigul. He is of opinion that the Salem and Coimbatore traffic, as well as that of travellers and the large number of pilgrims proceeding to Ramaisweram and to the south, will follow the railroad by Trichinopoly, but that the Tanjore and Trichinopoly traffic will be lost if the southern branch of the Railway be taken from Caroor by Dindigul.

6. Mr. Betts adduces several other minor reasons for preferring the eastern route; but, on consideration of all the information that has been collected on the subject, the Government are inclined to think that notwithstanding the apparently larger traffic to be found on the eastern route owing, it is believed, to the existence of a good road, and to a large temporary demand for food grains in the southern districts in consequence of the deficient harvests of the two last years, the western route from Caroor *via* Dindigul is, on the whole, more promising. Both the Agent and the Chief Engineer concur in believing that the through traffic under any circumstances will be secured to the Railway. It is then to other sources of traffic that attention must be given, and as there appears to be little development of local or other traffic to be expected on the eastern route, while, on the other, a Railway from Madura *via* Dindigul to Caroor would open up populous and productive portions of the Madura and Coimbatore districts, and would bring the Madras Railway, with the districts it commands, into most direct communication with the south, preference, it seems to Government, must be given to the Caroor and Dindigul route.

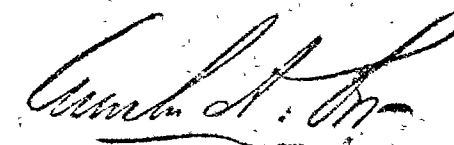
7. The Government are confirmed in this view by the opinions of Officers so well able to decide upon the relative advantages of the two routes by their long and intimate knowledge of the southern districts of the Presidency as Mr. Thomas Clarke and Mr. Levinge, the late Collectors of Madura, and Mr. P. Grant, the Collector of Coimbatore, and His Excel-

See Reports in G. O., dated 16th March 1861,
No. 205.

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lency in Council is therefore pleased to approve of the concentration of the survey parties on the Caroor and Dindigul line as recommended by the Consulting Engineer.

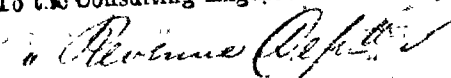
(True Extract.)



Colonel, R. E.,

● Secretary to Government.

To the Consulting Engineer for Railways.



Exd. S. T. Augustin.

Received 1868 10/1/88
from [unclear] 10/1/88

Proceedings of the
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Ordered 14th 3rd
Received 15th 7th 1858.

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Approval of the Board
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