M.R.O. 14—13,000—27-9-24

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1062 Press ~~Mis.~~

465-68 Dated 22-4-1868.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 22*nd April* 1868.

No. 465. Read the following Proceedings of the Madras Government in the Public Works Department:—

Passing orders on the Report upon the progress of the works on the North-West Line of the Madras Railway, and referring to Revenue Department paragraph 20 of that report relative to certain roads as Railway-feeders. } (Here enter 16th April 1868, No. 1,139.)

No. 466. ORDER THEREON, 22nd April 1868, No. 1,062.

Miscellaneous.

Communicated to the Board of Revenue, whose particular attention is requested to the provision of Railway-feeders from District Road funds wherever necessary to secure to the district the earliest and most full advantage of the system of Railways.

(True Extract.)

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

To the Board of Revenue, with Proceedings Public Works Department, No. 1,139.

Exd. S. T. Augustin.

Proceedings of the Madras Government, Public Works Department.
16*th April* 1868.

No. 214. Read the following letter from the Consulting Engineer for Railways, to the Secretary to Government, Public Works Department, dated Madras, 23rd March 1868, No. 97 :—

1. I have the honor to submit the following report upon the progress of the works on the North-West Line of the Madras Railway, which I have lately inspected in company with the Agent and Manager. The Acting Chief Engineer also accompanied us over part of the works.

2. The line is at present available for traffic as far as Moodanoor, to which point it was opened on the 1st August 1866; the distance from Madras being 196 miles.

3. As the Government are aware, the whole of the works upon the remainder of the North-West Line, including the Bellary branch, have been, from time to time, made over to different Contractors; a list of whom is given in an appended statement, in which are specified the dates upon which sanction was accorded to the contracts for the several portions of the line, and the dates upon which, according to the agreements, the works upon each portion should be completed.

4. It will be seen that the approval of Government to the introduction of the contract system was first given on the 10th May 1865; and the subsequent rapid growth of the system, which resulted in placing, within eighteen months, the whole of the works in progress on the North-West Line, over a distance of 190 miles, in the hands of Contractors, is chiefly due to the action of the Company's late Chief Engineer, Mr. Smart, who was strongly of opinion that the execution of the works, if intrusted to Contractors, would be cheaper, better, and quicker, than if carried out in the old method by the Company's Engineers, upon what has been termed the departmental system.

5. The confidence with which Mr. Smart regarded the working of the contract system was not, however, shared by the Deputy Chief Engineer upon Construction, Mr. Beresford Anderson, who, placed as he was in direct supervision of all the works in progress, ought to have possessed ample opportunities to enable him to judge of the degree of success which had attended the change of system. Mr. Anderson, on more occasions than one, placed his doubts upon record; especially in his report for the quarter ending the 31st March 1867, in which, after citing several notable instances of bad workmanship, he made some pertinent comments upon certain circumstances which had attended the introduction of the contract system, and which, in his opinion, imported elements of danger. This report of Mr. Anderson's was published in the "Madras Railway Gazette" for the month of May 1867 by the Chief Engineer, with remarks appended to it, which had the undoubted tendency to depreciate Mr. Anderson's opinion, and to weaken his authority. As the "Railway Gazette" is officially circulated to all Engineers on the line, it is hardly surprising that this injudicious act of Mr. Smart's caused a misunderstanding between himself and Mr. Anderson, which led, a few months later, to the latter gentleman's resignation, and which has recently eventuated in the termination of Mr. Smart's agreement, under orders from the Board of Directors.

6. I have mentioned these facts in detail, as I found it necessary, when inspecting the works in progress, to make constant reference to the opinions which have been recorded by Messrs. Smart and Anderson as to the character of the workmanship and material supplied by the Contractors. The subject is one which the Board of Directors, in their recent* letters to the Agent, have discussed at considerable length; and I think it right to preface this report with a brief statement of the facts. I do not feel that I am called upon to give here my opinion as to the comparative merits of the two systems of executing Railway works in this Presidency, viz., by the agency of the Company's Engineers on the one hand, and of Contractors on the other; but I consider it due to Mr. Anderson to state that the results of my late inspection have thoroughly convinced me that his anxiety as to the character of the work in

* No. 401, 13th September 1867.
„ 405, 6th December „

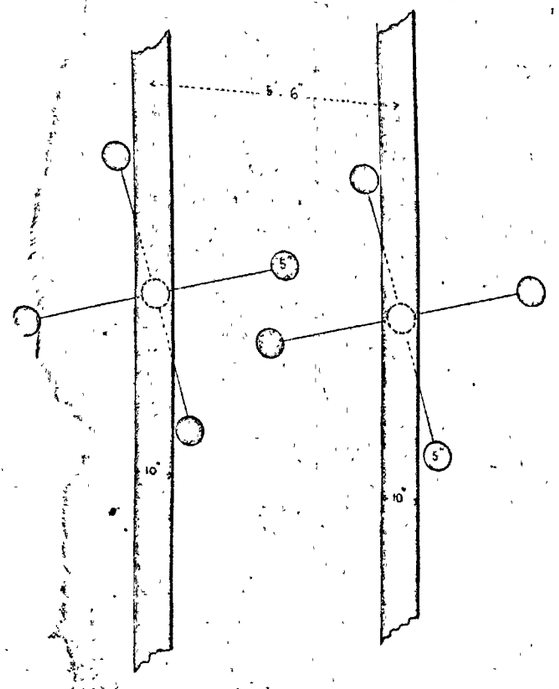
progress was by no means unfounded, that, when he drew attention to the subject, much of the work was of a very unsatisfactory nature, and deserving of strong censure, and that he is fairly entitled to the credit of the improvement which I am glad to say has since become manifest.

7. I first inspected the works on the main line between Moodanoor and Raichoor, and afterwards the Bellary branch. I will report upon them in that order, taking them according to the Engineering Districts into which they have been divided.

8. District VIII.—The work upon this district, which has been let to Mr. Barnett, is almost completed. As far as the Chittravatty river the road is now in excellent order, and, with the exception of some fencing, which will soon be finished, is ready for traffic.

* Distant from Madras 210¼ miles.

The Condapoor* station is in this district, and the work is well advanced. The bridge over the Chittravatty river, which was visited by the Governor during January, consists of forty girder openings, each of 70 fee from centre to centre. Owing to the great depth of sand in the river bed, it was found advisable to construct nineteen piers, in the centre of the river, of screw piles the rest being built of blue lime-stone. The piles are arranged so as to form trestles, each trestle consisting of five piles, and two trestles forming the pier for the single line of the rails. Owing to this arrangement, the inner piles of the two adjoining trestles necessarily cross each other, as shown roughly in the margin; a fact which seems to have been overlooked in the drawings sent from England. As the thickness of each pile is only five inches, this would not make much difference, provided that the two piles were screwed close to each other; but I regret to say that in some of the piers in this bridge there is a most unnecessary space, in some cases of about 15 inches, between the piles in question; and the consequence is that the girders, instead of resting directly upon three piles in each trestle, rest upon the centre pile only, and in being rolled into position, have exerted a leverage which has tended to twist the upper portions of the trestles, and to move the piles slightly from their proper positions. I made a careful examination of the bridge with the Chief Engineer, and we came to the conclusion that it would be well to lift the weight of the girders off the piles, in order to bring the latter into their true positions. Upon our return we found that this was being carried out by Mr. West,



the Company's Engineer in charge. It will be necessary to unscrew comparatively few piles, only those which have been bent; and the necessary work will probably be finished before June. In the meantime the temporary line of rails across the river bed is being used for the conveyance of material trains, &c.

9. District IX.—The work upon this district has also been let to Mr. Barnett, and the greater part is well advanced. The earthwork is almost finished, and so is the greater part of the smaller masonry works. At one or two places the work in progress was not of a satisfactory kind: especially at one of the largest pieces of masonry in the district, a bridge of eight 30-feet arches, where the material and workmanship were by no means what the Company had a right to expect from the Contractor. Instructions were given for the inferior work to be removed, and it was satisfactory upon our return to see a marked improvement.

* Distant from Madras 227½ miles.

At the Tadputry* station the platform wall is built, and the foundations for the station-house, goods-shed, and salt-store are finished. There has been some difficulty about the water arrangements at this station, and it was at one time proposed to stop trains for water at the Pennair river, six miles further westward; but this would have been an unsatisfactory arrangement in many ways, and it is now decided to bring water in iron pipes from the nearest point of the river, a distance of barely half a mile. Judging from the rate at which the work is now progressing, I see no reason why the line should not be opened for traffic to Tadputry in the course of about four months.

A vegetable fence of aloes has been planted along the whole of this district, but it has been by no means uniformly successful, and an iron fence is now being put up as rapidly as possible.

† Distant from Madras 233¼ miles.

‡ *Vide* G. O., 19th April 1866, No. 1,220.

§ G. O., 13th March 1867, No. 753.

I was much disappointed with the progress made at the Pennair† bridge since I visited it,‡ two years ago: indeed nothing seems to have been done since the date of Colonel Anderson's inspection§ last year. Scarcely one-half of the masonry has yet been completed, and eleven of the piers have still to be founded. Upon our return, however, there was a much greater show of activity at the bridge; and as Mr. Barnett has taken the work under his immediate superintendence, I trust that its future progress will be more satisfactory.

10. District X.—The first section of this district was let to a Mr. Horgan, but upon his failure the contract was handed over to Mr. Barnett. The earthwork is almost finished, as is also the masonry, the greater part of which is of excellent quality. The largest bridge in this section, one of six 30-feet girder openings, is however an exception to the rule, and some of the work was so inferior that it was necessary to order eight courses to be removed over the whole of the bridge. This was one of the works to which Mr. Anderson took special exception when it was being built a year ago; but his objections were over ruled by Mr. Smart, under whose orders the work was passed and taken over from the Contractors, so that the cost of removing and rebuilding the condemned work will fall upon the Company.

* Distant from Madras 242¾ miles.

At the Royalcherroo* station the platform wall has been built, and the foundations for the station buildings were being put in at the date of my visit.

The second section of District X was let to Messrs. Moonesawmy Chetty & Co., but after the work had gone on for months in an unsatisfactory manner, it was recently taken out of their hands, and arrangements have been now made for carrying it on by departmental agency. This section is the only part of the North-West Line upon which the work is not now in the hands of Contractors; and although the improvement in the quality of the work, since Mr. Scott undertook the management, is most marked, I see no reason to suppose that the cost will be greater. In other respects also I look with satisfaction upon the late change in the execution of the works on this portion of the line. There still remains more than enough under execution by contract to thoroughly test that system, and the re-introduction of the departmental system over even a few miles will tend to produce a wholesome spirit of emulation, and must, I think, produce good results.

Most of the earthwork on this section is completed, but not one-half of the masonry is done, and all the most difficult work has been left untouched. Taken in conjunction with the backward state of the Pennair bridge, the work upon this section is so heavy that I see no reason to expect the line to be opened to Gooty till towards the end of 1869.

11. District XI.—The first section of this district has been let to Mr. Fox, and the work is now fairly advanced. Most of the earthwork is finished, and more than half of the masonry, which is in general of a fair quality, though the stone used is of small size. In some parts of this section good water is scarce, a want that is still more severely felt in parts of the line further north, and it is clear that great and constant care on the part of the Company's Engineers is necessary to prevent the workmen from using the mortar too dry.

† Distant from Madras 257½ miles.

The work at the Gooty† station has been commenced, but little has been done beyond building the platform wall.

The second section of District XI has been given on contract to Mr. Barnett, as far as the point where the Bellary branch is taken off. The work upon this portion of the line has evidently suffered from want of proper supervision. The present Engineer in charge suffers much from ill-health, and the gentleman whom he very lately relieved had been for some time unfit for work from illness. That such supervision was necessary is very evident, as some specimens of the work were far from satisfactory. About two-thirds of the masonry, and about half the earthwork, still remain untouched.

‡ Distant from Madras 273 miles.

Nothing has been done at the Goondacul‡ station beyond marking out the site.

12. Districts XIV to XVIII.—These districts carry the line from the Goondacul junction northwards, through the town of Adoni, to within seven miles of the Toongabudra river. The country through which they pass is almost uniform in character, consisting generally of black cotton soil, and the works throughout are in nearly the same state of progress. The whole of these districts have been let

Mr. Barnett, forming part of the extensive contract which was laid before Government by Colonel Anderson on the 3rd* November 1866.

Vide G. O., 17th November 1866, No. 3,674.

About one-fifth of the earthwork remains to be executed, and about three-urths of the masonry. The latter is everywhere of fair quality. The works emselves are generally small, but the stones are carefully selected, and the asonry is good and sound.

District XVIII deserves special mention on account of the excellent aterials used in the bridges, and the great care which has evidently been taken y Mr. Jones in turning them to the best account. Throughout Districts XIV nd XV, there is great scarcity of water, which has at some points to be carted rom a distance of three miles. The greatest care on the part of the Engineers is ecessary to prevent dry mortar being employed.

‡ Distant from Madras
280½ miles.
294½ ,,
307 ,,
324½ ,,

The Muddykerra,‡ Auspree, Adoni, and Hosghee stations are situated within these districts, but beyond marking out the enclosures no work has yet been done.

13. Districts XIX and XX.—These districts carry the line to Raichoor, the oint at which it is to meet the Great Indian Peninsula Line from Bombay; the vhole of the work being in Mr. Barnett's hands. Upon District XIX about half he earthwork has been executed, but very little of the masonry, with the exception f what has been done at the bridge over the Toongabudra. Upon district XX bout one-eighth of the earthwork has been executed, but no masonry.

§ Distant from Madras 333½ miles.

The Toongabudra§ bridge is to consist of 58 girder openings, measuring ch 70 feet from centre to centre, or 64 feet in the clear. The length of the idge will be more than three-quarters of a mile. The point chosen for crossing e river is most favorable, a bed of gneissose rock stretching from bank to bank. his rock is intensely hard, and much heavy work is entailed in levelling its rface to obtain foundations for the piers. Till lately there has been much dis-ssion with the Contractor as to the description of work to be used in the piers, considerable difficulty has been experienced by the Engineer in charge, f. Robinson; but a more satisfactory specification has now been drawn up in tail, and the work, upon our return, was being carried on in accordance with its ovisions. Of the fifty-seven piers, seventeen on the south side, and twenty-one the north side are in progress, more or less advanced. The stone now being used of a very fine description. I visited two of the quarries from which it is brought; e yields stones varying from 12 to 18 inches in thickness, the material being a fine anite, worked entirely by hand; while from the other is obtained an excellent salt, which breaks readily with a beautifully square cleavage. In the deep bed the river, the piers will stand about 40 feet above ground; and when finished, bridge will be the largest and the most important work in the Railway system this Presidency.

To the north of the Toongabudra the line has been laid out by Mr. Robinson h great care and judgment, and the masonry works will be few in number, and small dimensions.

14. The position of the Junction Station at Raichoor has been the subject of some discussion, as the Government are aware. The site* originally chosen was objected to, as being too near the old fort; and several proposals were subsequently made to obviate the objection. I have already† reported that after a careful examination of the country, the best site is, in my opinion, to be found at about 1¼ miles to the north of the present Junction, on the Great Indian Peninsula Line. The town lies entirely to the north and north-east of the fort, and a station built to the south would be very inconveniently situated as regards the requirements of the local traffic: while the two lines of main road which cross at Raichoor, that running east and west between Lingasoogoor and Kurnool, and that running north and south between Hyderabad and Bellary, lie close to the site recommended by me, and which in all other respects seemed unobjectionable.

* Distant from Madras 351¼ miles.

† *Vide* No. 85, dated 12th instant.

15. From Raichoor I visited the Kistna, to enable me to form an opinion as to the progress of the Great Indian Peninsula works, and the probable time when they will be completed to Raichoor. The crossing originally fixed on, to which Colonel Anderson alluded in paragraph 9 of his letter, dated the 22nd February 1867, No. 50, has been abandoned on account of the deep water which would have been encountered in founding the piers, another crossing has been selected about two miles higher up the Kistna, close below the point where it is joined by the Beema. It has, I believe, been proposed to cross the river here with iron girders, in spans of 100 feet, the piers to be formed of iron cylinders seven feet in diameter, resting on masonry basements. At the time of my visit nothing had been done on the spot beyond the collection of material.

The change in the site of the bridge has necessitated the abandonment of several miles of the old line, principally earth-work, upon either side of the river.

16. Bellary branch. Districts XI, XII, and XIII. The works upon the second section of District XI, westward of the Goondacul junction, have been let to Balakistnamah Naidoo. This portion of the line is short, being under four miles in length, and the work is well advanced. Almost all the earth work is finished, and half of the masonry, which is of excellent quality.

Districts XII and XIII carry the line into Bellary. The work here has been let to Mr. Ross, and is fairly advanced. Most of the earth-work is done, and about a quarter of the masonry. I regret to say that in several cases the latter did not come up to the standard which, in my opinion, the Company have a right to demand. The Contractor has considerable difficulties to encounter, especially in the carriage of materials, which have to be brought from great distances, but these difficulties cannot be accepted in palliation of bad work.

The Joladarashy‡ station has not yet been commenced.

‡ Distant from Madras 191 miles.

§ Do. do. 296¾ miles.

The bridge§ over the Huggry river is also uncommenced. It will consist of twenty-four girder openings, each measuring 70 feet from centre to centre. The girders will rest upon screw piles, arranged similarly to those at the Chitturavatty bridge, as described above in paragraph 8.

At the Bellary‡ station, which will, for the present at least, be the terminus of the line in this direction, no work has been done beyond the collection of stone, which is available within the station enclosure in any quantity, and of excellent quality. The site for the station has been judiciously chosen. It occupies a large open space, immediately to the east of the fort, and readily accessible from all parts of the town.

‡ Distant from Madras 305 miles.

17. As regards the time when the completion of the successive sections of the line may be expected, I have already stated that Tadputry will probably be reached in about four months, and Gooty towards the end of next year.

It is of course as yet impossible to calculate with any approach to certainty the date when the line will be opened throughout to Raichoor, but I regret to say that I see no reason to expect it before the close of 1871; and, from what I could learn, I do not anticipate that Raichoor will be reached by the Great Indian Peninsula line even by that date. If through communication between Madras and Bombay is effected early in 1872, I shall be agreeably disappointed.

18. The Government will observe that the dates which I have named as those upon which the successive sections of the line will probably be opened are considerably later than those named in the agreements with the respective Contractors. In reply to a reference which I made to know whether it was intended to exact from the Contractors the stipulated penalties for non-performance of their agreements, the Agent quotes as follows from a communication received from the Acting Chief Engineer, in which he expresses his entire concurrence:—"Considering how entirely we are committed to the contract system on the unopened portion of the North-West Line, and how seriously the interests of the Company are involved in the success or failure of the Contractors, I am not prepared to recommend a step that would in all probability be productive of financial embarrassment, and would therefore tend to delay still more the completion of the works. The power to exact the stipulated penalties should still be retained to protect the Company against any further undue delay." This is an unsatisfactory state of matters, as it amounts to a confession that the penal clauses in the agreements are comparatively useless; but under the circumstances I am obliged to acquiesce in the propriety of the Chief Engineer's decision.

19. During my late tour I was strongly impressed with the undesirability of a place so important as Gooty has now become, being permanently left in its present unprotected state; and, looking to the almost certain extension of the Railway during next year, I think it right to allude to the subject. It has been laid down* by the Government of India that the necessary protection of the principal Railway stations will be a main consideration in distributing the army; and, without adverting to its geographical position, I would respectfully urge that Gooty will soon be a place of far greater importance than hitherto. Besides being the point at which five main lines* of road meet, it will ere long have the Railway passing at the foot of its rock fort; and although it is true

* *Vide* Proceedings of Government of India, No. 5,783 R, dated 6th December 1861.

* To Cuddapah.
Kurnool.
Adoni.
Bellary.
Bangalore.

that this famous old fortress has been nominally dismantled, the most cursory inspection is enough to show that the work of destruction has been merely nominal, and that in a few days it might be restored to its former strength. Many of the buildings within the fort are almost intact, and a small outlay would suffice to render them again available for use. With all due respect I venture to urge the far greater importance, under present circumstances, of stationing a garrison at Gooty than at Kurnool.

20. With the exception of the short road leading from Gundaloor to the Condapoor station, which is being placed in excellent order, I was unable to learn that any of the lines of road mentioned by Colonel Anderson in paragraph 11 of his letter, dated the 22nd February 1867, is being proceeded with. Of these by far the most important at present is the line which is to connect Anantapoor with Tadputry. As I have already remarked, Tadputry will become the terminus of the North-West Line in the course of a few months, and will probably remain so for more than a year. The station is situated in the middle of a plain of black cotton soil, and unless a road be soon made, it will be inaccessible during rainy weather. The attention of the Superintending Engineer has already been drawn to the great need of this road, and I would urge the importance of pushing on the work as quickly as possible.

21. Before concluding this report I wish to make a few remarks upon the very great importance of the works now in progress on the North-West Line, and the impossibility, under present arrangements, of giving to them that amount of supervision and close inspection to which they are, in my opinion, entitled. The work now in progress is spread over an area of 190 miles, and the cost will not be far short of two millions sterling. When it is remembered how intimately the interests of the State, both direct and indirect, are connected with the success of the undertaking, there can, I think, be no doubt that it would be well to provide for supervision of a more frequent and thorough nature than is now possible.

* *Vide* G. O., No. 57 dated 22nd Feb. 1856.
Do. ,, 125 ,, 2nd May ,,
Do. ,, 216 ,, 8th July ,,

22. The present strength* of this department was fixed twelve years ago, when the Railway system in this Presidency was in its infancy. There was then not one mile of line opened for traffic, work was in progress upon only a short portion of the South-West Line, the North-West Line was not commenced, while the Great Southern of India Railway and the Tramway Company's line had not been even proposed.

The length of open line in this Presidency now exceeds 830 miles, and the proper inspection of the works should occupy, upon an average, from a fortnight to three weeks in every month. Surveys for additional lines are being pushed forward in different directions, and I have been called upon to submit a report upon the general extension of the Railway system in the Presidency. When it is borne in mind that the current duties of the Office necessitate the almost constant presence of either myself or my Deputy in Madras, I trust that the Government will see the impossibility of giving to the works under construction on the North-West Line the attention which they require. These works extend to a distance of more than 350 miles from Madras, and a thorough and satisfactory inspection of them cannot be made, under favorable circumstances, in less than two months. The fact that the works are being carried out by contract increases the necessity for close and constant supervision.

Under the circumstances, it is my duty to represent that the strength of this department is not now adequate to the due performance of the important duties which devolve upon it, and to recommend the appointment of another Deputy Consulting Engineer, a recommendation which I earnestly trust will meet with support from Government.

Summary of the various Contracts given out on the North-West Line.

District.	Date of sanction.	Name of Contractors.	Time of completion.	Remarks.
Main Line.				
District 8, Section 2	20th May 1865 ...	Mr. E. W. Barnett	1st September 1866.	
Chittravutty bridge	1st December ,, ...	Do.	31st August 1867.	
District 9, Section 1	5th March 1866 ...	Do.	1st July ,,	
Do. 9, do. 2	17th December 1866.	Do.	1st January 1868.	
Do. 10, do. 1	9th August 1865 ...	Mr. G. W. Horgan	1st January 1867.	Contract taken over by Mr. Barnett, 12th July 1866.
Do. 10, do. 2	9th February 1866 ...	Mooncsawmy Chetty & Co. ...	1st February 1868.	Contract resigned; work being carried on by Engineering department.
Do. 11, do. 1	7th March ,, ...	Mr. J. T. Fox	1st July 1868.	
Ms. Ms. Chs.				
Do. 11, do. 2, from 11 to 18 55 ...	13th March 1867 ...	Mr. E. W. Barnett ...	31st December 1868.	
Do. 14 to 20	20th November 1866.	Do.	31st December 1869.	
Bellary branch line.				
Ms. Chs. Ms. Chs. Lks.				
District 11, Section 2, from 18 55 to 22 47 15	13th March 1867 ...	Balakistnamah Naidoo & Co. ...	30th September 1868.	
Do. 12, Sections 1* and 2†	*30th Aug. 1866 ...	Mr. Milbourne Ross ...	30th July 1868.	
Do. 13, ...	†25th January 1867...	Do.		
	25th January ,, ...			

(Signed) J. H. M. SHAW STEWART, Major, R. E.,
Consulting Engineer for Railways.

MADRAS,
23rd March 1868.

No. 215. ORDER THEREON, 16th April 1868, No. 1,139.

RAILWAY, No. 14.

1. The Government have perused this report with much interest. They are glad to observe that the works on the North-West Line are on the whole favorably progressing, but they regret to learn that the Railway as far as Gooty and Raichoor which they were originally led to believe would be opened for traffic in July 1867 and July 1869, respectively, is not likely to be completed, in the former case before the end of 1869, and in the latter before the close of 1871 or the early part of 1872.

2. The attention of the Company's Chief Engineer should be specially drawn to the defective character of the work which is being executed in some of the districts, and all possible care should be taken to ensure the employment everywhere of material and workmanship of unexceptionable quality.

Referred to in paragraph 14.

3. The Consulting Engineer's letter of the 12th March 1868, No. 85, has been separately disposed of.

4. The suggestion in paragraph 19 will be referred for consideration in the Military Department.

5. Paragraph 20 will be communicated to the Revenue Department. The Government note that money has been allotted from Local Funds for the undermentioned Railway feeders:—

	Allotment for 1867-68.	Allotment for 1868-69.
1. Road from Gundaloor to Condiporam. Estimate Rupees 12,900.	7,000	.....
2. Road from Anantapoor to Tadapatree. Estimate Rupees 42,600.	23,000	19,600
3. Road from Adony to Gooty. Estimate Rupees 15,990	10,000	5,000
4. Road from Chippagiry to Madikara	10,000	.....
5. Road to the Aspri station	.....	1,000
6. Road from Halvy to Rachumurry, via Hosghee...	.....	4,000

Plans and estimates for the three latter lines, as well as for the other Railway feeders recommended by the Consulting Engineer, should be submitted for sanction as early as practicable, and no unnecessary delay should be permitted to occur in carrying on the works to completion as soon as the requisite funds are made available.

See G. O. No. 753, dated 13th March 1868.

6. The Government have given the subject of paragraphs 21 and 22 of the Consulting Engineer's report their most careful attention, and, looking to the present magnitude of the Railway system in this Presidency, as well as to the great extension which it is probable will be given to it, and considering the absolute necessity for the closest possible supervision on the part of the Officers of Government especially over the works under construction, they are satisfied that the duties devolving upon the Consulting Engineer's Department are more onerous than

can be efficiently performed by two Officers, and that the establishment sanctioned in 1856 is no longer sufficient. Entertaining these views, and believing that the addition of an Assistant Consulting Engineer for Railways will be attended with most beneficial results, His Excellency in Council will be prepared to address the Government of India upon the subject on the receipt from the Consulting Engineer of the usual tabular statement in the prescribed form.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for Railways.
" Revenue Department.
" Military Department.
" Superintending Engineer, 3rd Division.

Exd. S. T. Augustin.

Revenue 1868. Dept.
Prov. of Govt. for April.
No. 1362.

Proceedings of the
Govt. P.W.D.

Dated 16th April
Received 20th " 1868.

No. 1139

Rec'd of the Board of Revy 2 augt
169 Ch 2704

No 1062. 22nd Apl

Passing orders on the
Report upon the
Progress of the work
on the South bank
Line of the Madras
Railway & referring
to Rev: Dept: para 20
of that report relative
to Certain roads as
Railway feeders—
W. Mr. Order

A. 465 & 466

8-1062.

Govt. Rev. Dept.
Rev. Progress of certain
Main Rds is requested
& the provision of
Rs. 1,00,000 from
Public Works Funds
recommended
& the Govt. of India
Govt. public attention
to the expediency
of the undertaking.

W. Taylor Esq. Offg. Secy. to Govt. Pro. Rev. Dept. No 1139 Dated 22nd Apl 1868.