Urgent

Public Works (1899) Department.

RAILWAY BRANCH.

G.O., No. 283-84 Ry

DATED 10th March 99.

120/4/20/36/1

[Despatch Abstract.]

Opening of the Ennur - Indur section of the H.G.V.Ry.

Ordered that the correspondence regarding the — for passenger traffic, be forwarded to the S of S for info

Forwarding Copy of Pros embodying Correspondence regarding the — for passenger traffic.

Indexed.

BACK PAPERS.

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

FURTHER PAPERS.

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

SULTING ENGIN

43

2 Pen

Government (1899) of Madras.

PUBLIC WORKS.

H.E. and Circ

A.54
17.3.99

F.W.S.
16/3/99

Recd. } 1899
Regd. }

Enclosures

Spare copies A.H. 20-3-99

H.S. 20-3-99

G.O., Nos. 283, 284 Ry., 10th March 1899.

MARCH.

Opening of the Ennur-Gudur Section of the Bezwada-Madras Railway

Forwarding copy of Proceedings embodying correspondence regarding the — for passenger traffic.

H.E. & Arms
16.3.99

Ry. H.E.
18.3.99

Arms
18.3.99

R.O.
22.3.99

Issue
F.W.
22/3

BACK PAPERS.

43

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper:—

G.O., Nos. 1516-17 Ry., dated 9th December 1898.

Read also the following papers:—

From—The Secretary to the Govt. of India, P. W. Department.
To—The Senior Government Inspector for Railways, Madras.
Dated—Simla, the 22nd December 1898, No. 1964 R.C.

In continuation of Public Works Department telegram No. 014 R.C., dated 14th December 1898, quoted on the margin, I am directed to request that when the speed restriction imposed by the Senior Government Inspector has been removed, the fact may be intimated for the information of the Government of India.

"Your inspection report of Bezwada-Nellore and wire 49-B. Provided you are satisfied that paragraph 2, Circular 6 of 1893, is not infringed, the sanction of the Governor-General in Council to open the above line is given under section 18, Railway Act."

Telegram from—The Joint Secy. to the Govt. of Madras, P. W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—14th February 1899, No. B./12.

Ennore-Gudur Section of Bezwada-Madras will be inspected to-morrow. As from recent unofficial inspection road is known to be in good order, will you delegate power to me under V. 1. (*b*) of Rules to open on my responsibility immediately after inspection, subject to subsequent confirmation as then provided.

Telegram from—The Secretary to the Govt. of India, Public Works Department.
To—The Joint Secy. to the Govt. of Madras, Public Works Dept., Railway Branch.
Dated—Calcutta, 14th February 1899, No. 039 R.C.

Your wire B./12. Under chapter 4, paragraph 25, Indian Railway Act, power is delegated to you to open Ennore-Gudur Section of Bezwada-Madras Railway.

From—The Government Inspector of Railways, Madras.
To—The Secretary to the Government of India, Public Works Department.
Dated—15th February 1899, No. 0578.

I have the honour to forward herewith the report, prior to opening for passenger traffic, of the Ennore-Gudur Section of the Bezwada-Madras Railway. This report is submitted direct in order to save time. I have seen the Manager, East Coast Railway, who has arranged a suitable time-table, and is arranging to open on the 23rd, subject to telegraphic sanction from the Government of India, and subject, also, to any further restrictions which the Senior Government Inspector of Railways, Madras, may consider necessary.

NOTE of an Inspection of the Ennore-Gudur Section of the Bezwada-Madras Railway prior to opening for passenger traffic.

Length—74·60 Miles. Gauge—Standard, 5′ 6″.

1. The inspection was made on the 15th February in company with the Engineer-in-Chief and Executive Engineer of the section.

2. *Formation, Earthwork, &c.*—The section chiefly consists of low bank, there being only two or three small cuttings. The banks are, as a rule, up to full width and having had at least two seasons of rain, one a very heavy one, are pretty well consolidated. Two small breaches took place near Sulurpet last season and where the new bank has been thrown up subsidence may be expected as soon as rain falls.

3. *Bridges and Culverts.*—Handrails or parapets are unnecessary. The largest span being 60 feet, no special means of allowing for expansion are necessary. Girders are not held down to their bedplates by holding down bolts as was intended. I understand that arrangements are being made for fixing the bolts. The Ennore bridge, 30 spans of 40 feet, has safety platforms provided to enable workmen to escape from an approaching train. I do not consider that these are necessary on any other bridge in the section. Not less than 18 inches of earth has been allowed over all arches. The weak points in the provision of waterway for rivers were shown during last monsoon which was one of the heaviest on record. Breaches occurred on both sides of the Kalinga bridge owing to the river breaching its protection bunds, the question of providing additional waterway here is under consideration. No other breaches took place, though at the Swarnamukhi and Mamadikalva bridges the flood was higher than had been expected. The road is carried on the top booms of all girders with cross sleepers resting directly on the girders. The main girders are in all cases properly braced.

4. *Fencing.*—There is no fencing on the line. I understand that sufficient materials have been indented for to enclose station yards and 100 feet on each side of more important level crossings.

5. *Level Crossings.*—Between Ennore and Navudupeta all level crossings have external guard rails. At the more important crossings gatekeepers' lodges have been built. No gates have as yet been erected. None will close across the line. Between Nayudupeta and Gudur the level crossings are in a backward state, one or two I noticed with sleepers instead of guard rails and several without even these. The road was in some cases above the level of the rails and a lot of levelling off will be necessary. These should have the Engineer's immediate attention.

6. *Mile and Gradient Posts.*—Mileposts have been provided over most of the section, but these can only be considered as temporarily erected, as the zero point of the line has not been finally fixed as yet. Changes of gradients have been marked by gradient posts over part of the section. This work is in hand and will be completed. The telegraph poles are not numbered.

7. *Ballast and Permanent-way.*—About half the section is ballasted with sand and about half with broken stone. As a general rule the ballast is sufficient and of good quality. A lot of work has been done since I last travelled over the line. Sleepers are of pynkado, sal and deodar; in all cases pynkado sleepers are placed next to the joints, no bearing plates are used but the sleepers next the joints are double spiked. I consider the sleepers of good quality. Proper allowance is made for expansion of rails. There are no curves sharp enough to necessitate the use of check rails.

8. *Station Buildings, Platforms, &c.*—The following stations are practically complete in all respects: Minjur, Ponneri, Tada, Sulurpetta, Dhoravari Chattram, Nayudupeta, also the flag stations. The state of the remaining stations is as follows. *Ennore.*—I found the signals and points not in working order; these had not been handed over by the Engineering Department who have been erecting the new List and Morse signals to the Traffic. When I saw them the points would not work and the connecting rod had to be detached from the points before the engine could be passed over. This matter will receive the immediate attention of the Madras Railway Engineers, who are responsible for the work. *Gummidipundi.*—Signals not ready, loop not yet put in; platform is on loop; station house complete; rail level platform complete. I recommend that, for the present, this be only used by slow trains as a flag station. *Arambakkam.*—Signals not ready, loop not laid; switches and crossing only put in. The platform is sufficiently completed for the use of passengers: this may be used as a flag station by slow trains; switches must be kept spiked over. *Pedapariya.*—Loop not quite complete, signals not ready; platform, which is on loop, is ready. Until signals are ready this can only be used as a flag station and switches should be spiked over.

9. *Signals.*—These are all of the List and Morse type interlocked with the points. I have dealt fully with the state the work of erecting them is in under my remarks under unfinished stations. Where completed they seem to work most satisfactorily and the staff understand the use of them. At Ponnéri I noticed that the north home signals were not visible from the distant signal, the view was obstructed by a tree; this should be rectified. Distant signals show danger and caution, only both by day and night. Signal lamps are arranged so as to show a green back light when on and a white light when off.

10. *Points and Crossings.*—All these are of good design and workmanship; they are properly laid and work correctly.

11. *Turn-tables.*—There is a turn-table at Ennore and a triangle at Gudur.

12. *The Road.*—The running over nearly the whole of the section was excellent, very different to what it was when I was last over the line. At mile 48, where there is a temporary bridge, and between miles 50½ and 53, where the banks were damaged by the recent heavy monsoon, the line was not quite up to the usual standard. Between Nayudupeta and Gudur also the running was not very good. In all other places it was quite as good as on most lines that have been opened for traffic for years.

13. *Recommendations.*—I recommend that the line be opened for passenger traffic under the following restrictions:—

(i) That a restriction of speed of 20 miles an hour be enforced at mile 48 and between miles 50½ and 53.

(ii) That the stations mentioned as incomplete be only used as flag stations, and that their switches be spiked over for the through line till such time as the signals are in proper working order and interlocked with the points.

Telegram from—The Consulting Engineer for Railways, Madras.
To—The Manager, East Coast Railway.
Dated—16th February 1899, No. D./24. (Copy, No. 535, to Engr.-in-Chief, B.M. Ry.)

Be prepared for orders to open Gudur-Ennore Section on my receipt of Deputy Consulting Engineer's report to-morrow. I will then wire you fully.

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Manager, East Coast Railway.
Dated—17th February 1899, No. 26 D. (Copy, No. 547, to Engr.-in-Chief, B.M. Ry.)

Governor-General in Council having delegated to me powers, under section 25 Railway Act, I hereby, under authority of section 18, sanction your opening Gudur-Ennore Section for all traffic, subject to following restrictions: Speed 25 miles per hour as a maximum; following stations—Gummidipundi, Arambakkam and Pedapariya to be used only as flag stations pending completion of signals and switches, the points meanwhile being efficiently locked. Madras Railway Company have been directed to make good north points at Ennore. Speed from mile 48 to mile 53 limited to maximum 20 miles per hour. Night running permitted everywhere between Ennore and Bezwada.

Telegram from—The Government Inspector of Railways, Madras.
To—The Consulting Engineer for Railways, Madras.
Dated—17th February 1899.

East Coast Railway, Gudur-Bezwada Section. The road is everywhere in excellent running order; stations as a rule complete except palisading. Between Ponnur and Tsundur bank is being raised; restriction of speed necessary. As to Manager's request to be allowed to run at high speed tender first, I pointed out that the state of the road does not affect the question, there are few cattle; but with turntables at Ennore and Bitragunta and triangle Gudur should be no necessity to run tender first. Ongole station is backward; passenger traffic apparently large; platforms to-day crowded, and at several stations goods blocking up passenger platforms.

Report of the Government Inspector of Railways, Madras, dated 22nd February 1899.

Gudur-Nellore-Bezwada Section.

General.—I travelled over this section by ordinary mixed train on the 16th February. The road was everywhere in excellent order and, in its present state, I do not consider any restriction of speed necessary. Between Ponnur and Tsundur stations, however, the bank is being raised with black cotton soil from the borrow pits, and as the first shower of rain is certain to cause considerable and probably unequal settlement, I consider it advisable to recommend a restriction of speed on this length. The stations as a rule were complete with the exception of the palisading. Ongole station I noticed was backward and, as this is a refreshment-room station, it is important that it should be pushed. The refreshment-room at Bitragunta appeared to be working most satisfactorily. Everywhere I found the List and Morse signals working well with the exception of Tsundur where the work of raising the bank has made it necessary to temporarily disconnect the distant signal.

Traffic.—The traffic appeared considerable, and one mixed train a day in each direction quite unequal to carrying it. Most of the stations were crowded, and though probably most of the people were villagers who have not got over the novelty of a train, it was evident that many were passengers and some of them had hard work to obtain seats. At some of the stations the passenger platform was very inconveniently obstructed by goods.

Recommendation.—I recommend that the restriction of speed on the Gudur-Bezwada Section be raised to 30 miles an hour, but I would recommend a restriction of speed of 20 miles an hour between Ponnur and Tsundur stations. With the exception also of the restrictions specially noted for the Ennore-Gudur Section, I have no objection to a speed which shall nowhere exceed 30 miles an hour being permitted over the whole line.

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Manager, East Coast Railway, Waltair.
Dated—22nd February 1899, No. 27 D.

Government Inspector having submitted report as to state of whole section from Ennore to Bezwada, I hereby raise the maximum limit of speed from the 25 miles ordered in my telegrams, December 19th and February 17th, to 30 miles per hour, with following exceptions: miles 48 to 53 and between Ponnur and Tsundur maximum speed 20 miles per hour. Report actual date of opening.

Telegram from—The Secretary to the Government of India, P.W. Department.
To—The Senior Government Inspector of Railways, Madras.
Dated—Simla, 22nd February 1899, No. 305 R.C.

Government Inspector's letter No. 0578, dated Nellore, 15th instant. His Excellency the Governor-General in Council is pleased, under sections 18 and 19 of Indian Railways Act, to sanction opening for public carriage of passengers of Ennore-Gudur Section, Bezwada-Madras Railway, subject to conditions and restrictions recommended by Government Inspector, if confirmed by you, being observed until such time as that officer, after further inspection, shall order that they may be relaxed or removed in the interest of the public using it. Please advise Engineer-in-Chief Bezwada-Madras Railway and Manager East Coast Railway, direct, and telegraph actual date of opening sharp to Simla.

BACK PAPERS.

Date. G.O. No.

Memorandum from—The Secretary to the Government of India, P.W. Dept.
To—The Senior Government Inspector of Railways.
Dated—Simla, 22nd February 1899, No. 306 R.C.

Above copy forwarded by post to the Senior Government Inspector of Railways, Madras, with the remark that the Inspection Report of the section in question is subject to his confirmation, and the request that the usual documents prescribed by section I, paragraph 3, of the rules for the opening of a railway may be submitted at an early date.

2. It is further requested that the actual date of opening may be reported by telegram to this office.

3. It is also requested that when the speed restriction has been removed, the fact may be intimated for the information of the Government of India.

Telegram from—The Manager, East Coast Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—24th February 1899.

L. 51. Gudur-Ennore section opened for passenger traffic February 23rd.

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Secretary to the Government of India, Public Works Department.
Dated—28th February 1899, No. 32 D.

Ennore-Gudur section of B.M. Ry. was opened for traffic on the 23rd instant.

ORDER—No. 283 Ry., dated 10th March 1899.

A copy of these proceedings will be forwarded to the Government of India for information, with reference to their letter No. 306 R.C., dated the 22nd February 1899. The documents called for in that letter have already reached the Government of India with this Government's letter No. 1517 Ry., dated the 9th December 1898.

[Here enter No. 284 Ry., dated 10th March 1899.]

(True Extract.)

FRANCIS J. E. SPRING,
Joint Secretary.

To the Manager, East Coast Railway.
" Engineer-in-Chief, Bezwada-Madras Railway.
" Agent and Manager, Madras Railway.
" Consulting Engineer for Railways.

ENDORSEMENT—No. 284 Ry., dated 10th March 1899.

Forwarded.

(By order.)

FRANCIS J. E. SPRING,
Joint Secretary.

Exd. T. K. Narayana Aiyangar.

43

2 Prew

Government (1898) of Madras.

PUBLIC WORKS.

Recd. } 1898. Enclosures
Regd. } Spare copies

G.O., No. 1516 Ry., 9th December 1898.

DECEMBER.

Report of an Inspection, prior to opening, of the Bezwada-Nellore Section of the Bezwada-Madras Railway

Ordered that the — by the Government Inspector of Railways, together with the Senior Government Inspector's remarks thereon, be forwarded to the Government of India with the recommendation that the section may be opened for passenger traffic in time for Christmas holidays.

BACK PAPERS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper :—

G.O., Nos. 1375-76 Ry., dated 8th November 1898.

Read also the following paper :—

NOTE OF AN INSPECTION OF THE BEZWADA-NELLORE SECTION OF THE BEZWADA-MADRAS RAILWAY PRIOR TO OPENING FOR PASSENGER TRAFFIC.

Length, 157½ *Miles. Gauge, Standard* 5′ 6″.

1. *General.*—The inspection was made on the 1st, 3rd, 4th and 5th of December, in Company with Mr. Bartlett the Engineer-in-Chief and with the Executive Engineers throughout their respective divisions.

2. *Sections.*—The railway for the purpose of this report may be divided into three sections.

The Ennur-Gudur Section.
,, Gudur-Nellore ,,
,, Nellore-Bezwada ,,

3. *Bezwada-Nellore Section.*—As my inspection proved that the first of these sections is totally unfit for passenger traffic at present and as the Gudur-Nellore section has already been opened for passenger traffic I shall confine my remarks to the Bezwada-Nellore, or more properly the Kistna Canal-Nellore, section.

4. *Earthwork.*—The earthwork is generally light, there being no heavy banks and only two or three cuttings through laterite. In spite of the heavy rain which had fallen a few days previously the banks were in good order; this is partly ascribable to the amount of sand which had been trained out for topping and ballasting purposes and partly to the care which had evidently been taken to drain away the water. Very little water was lying in the side drains of the cuttings, though naturally the recent heavy rain had caused some silting up. Banks through tanks, or where water is likely to be ponded up, have, as a rule, been pitched and appeared to be efficiently protected.

5. *Bridges and Culverts.*—All bridges were complete with the exception of safety platforms for workmen and holding down bolts or some other device for preventing the girders from moving about on their bedplates. I do not consider hand rails or parapets necessary, the public are not permitted to make use of any of the bridges. The girders are supposed to be fastened down to their bedplates by holding down bolts passing through slotted holes, thus leaving the girders free to move lengthways when expansion or contraction takes place. These holding down bolts have however been omitted in some cases altogether and in some cases from one end of the girder. I understand that they were inserted in the case of the girders first erected; but whether from the nuts being too tightly screwed down or from care not being taken to properly centre the bolts in the slotted holes in the booms, it was found that they did not allow the girders to expand freely and consequently the masonry suffered. It will be a difficult matter to insert the missing bolts now, as some of them have been sawn off flush with the bedstones but it has been explained to the Engineer-in-Chief how in other ways the girders may be prevented from moving laterally on their bedplates. The main girders of the bridges are all properly braced together. Ample facilities for the escape of workmen from an approaching train are being given in the shape of safety platforms on the longer bridges, though these are not by any means complete yet. I am, however, of opinion that escape platforms are not really necessary, as the piers themselves afford refuges for workmen on short spans (the longest span on the railway is 70 ft.) and I found no difficulty in jumping down on to the piers while we were testing the girders. All arched or slabbed bridges and culverts have a cushion of earth of not less than 18 inches. The subject of waterway for bridges has been very thoroughly investigated on this section and, although differences of opinion still exist, I am of opinion that the waterway is sufficient, always provided that tanks do not burst.

Prew

SULTING ENGIN

4

6. *Fencing.*—There is no fencing on the line.

7. *Level crossings.*—There being no fencing, gates have not been provided though they will, I believe, be provided at crossings of the main road. Gate lodges are in many cases completed and in others are in progress. At about twelve level crossings guard rails have not yet been laid, sleepers doing duty instead. I was told that the guard rails are ready and will be in position in a few days.

8. *Mile and grade posts.*—Temporary mile posts have been placed alongside the line. The permanent stones will be erected as soon as it is settled from what point the mileage should count. At present it is reckoned from a point on the Madras Railway, 1·4 miles from the Central Station, a very confusing point to choose. It ought to be reckoned from whatever point is the Madras Railway zero. For the same reason the telegraph poles have not yet been numbered, except for a short length at the northern end. Grade posts mark, I understand, all changes of gradient.

9. *Ballast and permanent-way.*—Nearly all the section has had a large quantity of sand ballast laid. Very little stone ballast has as yet been put on the line though a very large quantity has been collected, broken and stacked at depots. Some more ballast of some kind is required near the Nellore end before restriction of speed can be removed.

10. *Sleepers.*—The sleepers are of timber, mostly pynkado with several miles of sal. They appeared to me to be of excellent quality especially the pynkado. No bearing plates are used, the sleepers next the joints are double spiked. The rails were properly fished, all fish bolts in place and the road was in excellent running order.

11. *Station buildings, platforms, etc.*—The following notes taken on inspection will show that much still remains to be done.

Padugopad.—Platform more or less complete but the excavation of the lever pit and drains for signal wires not filled in.

Talamanchi.—Platform half finished. Station-house and quarters just roofed in.

Allur road.—Platform nearly finished, but there is a large hole where the excavation of the lever pit, etc., is in progress. Station-house roofed in. Temporary watering arrangement near the centre of and on the platform.

Bitragunta.—Platform wall complete. Platform requires some dressing off and levelling. Station-house ready for roof, several quarters finished. Signal lever pit ready, but levers not yet in place.

The above notes give an idea of the state of stations between Nellore and Bapatla. At Bapatla mile 220 and north to Kistna canal junction the stations are very much further advanced, in fact practically complete.

At *Kolanukonda*, some three miles south of Kistna canal junction, there is a large ballast depot with a through siding and two lines off this to serve the depot. There is a telegraph hut and instrument and a very rough temporary signal. It is proposed to keep this as a block station when the line is opened. I think one set of points should be removed, they are not required. This will simplify signalling arrangements. A home signal for main line trains and a starting signal for ballast trains coming out of the siding should ensure safe working if block working is strictly adhered to.

12. *Signals.*—The List-Morse system of signals is in course of erection, and a few days should see all signals complete at most of the stations. At Nellore the signlas are erected and working. At Bapatla and stations north of it, the signals are either working or only require the attachments made. At stations between Nellore

and Bapatla, the signals have for the most part been erected, but the levers are in many cases not set and the wires are not attached. At Kavali and Uluvupad there were no distant signals and at Tettu only temporary distant signals.

In this connection I would mention that it was my intention to ascertain on the inspection if the station-masters at the several stations were thoroughly acquainted with the working of the List-Morse signals. I was, however, informed that at the request of the Traffic Department, East Coast Railway, all the construction station-masters had been served with one month's notice and that it was the intention of the Traffic Department to appoint new station-masters as soon as the line was opened for passenger traffic. A special man is then to be sent to spend some days at each station in turn and acquaint the station-masters with the List-Morse system of signalling. Meanwhile the signals are not, as a rule, being interlocked with the points. It would have been better policy, I consider, to have taught the station-masters their duties prior to opening for passenger traffic, and there must be some good men already on the Bezwada-Madras Railway, men who have seen and taken an interest in the erection of the signals and are already fairly conversant with the details. Personally I should not be prepared to recommend that night running be allowed till I had satisfied myself that the station-masters had mastered their duties.

13. *Points and crossings.*—I have little to say about these; they appeared to be all in good working order, and we passed over them smoothly except in one or two places where the new earthwork had evidently settled. The points will be interlocked with the signals and the levers are parallel to the line.

14. *Engine-turning at Gudur.*—As, pending the opening of the extension southwards, it would not be worth while to erect a turntable at Gudur, a triangle here is necessary and should be laid in before opening.

15. *Station yards.*—Sufficient siding accommodation appears to have been provided in all station yards. No scotch blocks are in use. The points of dead ends are supposed to be kept locked under the List-Morse locking arrangements; the same key that opens the through siding also opens the corresponding dead end, but these locks have not yet been fitted. What is required is an understanding between the Traffic Department of the East Coast Railway and the Engineers of the Bezwada-Madras Railway as to what is required for working the yards. Until the Traffic Department have authority to make their rules for working the yards and to say what they require in the way of scotch blocks, locks, &c., no satisfactory working is possible.

16. *Rolling-stock.*—The rolling-stock provided consists of 20 engines, 30 third-class carriages, 200 covered goods wagons, and 80 low-sided wagons. I am not prepared to say that this is sufficient, but as the line is a continuation of the East Coast Railway, I understand that the equipment has been made to suit their requirements. The inspection train consisted of a third-class Bezwada-Madras Railway carriage converted into an inspection carriage, an East Coast Railway composite and a covered goods. The travelling was exceedingly smooth and pleasant.

17. *Recommendations.*—It will be seen that a good deal of small work remains to be done before the section can be considered to have been satisfactorily completed. The following works must, in my opinion, be carried out before the line is opened.

(*a*) a triangle must be laid and be ready for use at Gudur.
(*b*) the remaining level-crossings must have guard rails.
(*c*) all platforms must be properly topped and cleared for a length of 300 feet in front of the station building, *i.e.*, all lever pits and signal wire drains must be completed properly, slabbed over and covered with earth.
(*d*) all temporary watering arrangements must be removed from platforms.
(*e*) either all signals must be completed, or the points must be spiked over to the platform line and the station treated as a non-crossing station.

18. I recommend that on the completion of the above works the Nellore-Bezwada section be opened for the public carriage of passengers subject to the following restrictions:—

(i) Speed never to exceed 25 miles an hour.
(ii) The running of passenger trains to be restricted to daylight only.

19. Before these restrictions are removed I consider that the following works should be completed:—

(*a*) The girders of bridges to be properly secured to their bedplates.
(*b*) The line to be more fully ballasted between Nellore and Bitragunta.
(*c*) All signals to be completed and properly interlocked with the points.
(*d*) All station-masters to be thoroughly familiar with their duties and with the working of the List–Morse signals.
(*e*) All station-houses to be completed and properly furnished.

20. The forms and certificates required to be furnished under Circular No. 6 Ry., dated 7th September 1893, are attached to this report, both for the Nellore-Kistna canal junction of the Bezwada-Madras Railway and for the Kistna canal junction-Bezwada section of the East Coast Railway.

MADRAS,
7th December 1898.

J. C. LYLE,
Govt. Inspector of Railways.

Remarks by the Senior Government Inspector of Railways, Madras.

I recommend that the Bezwada-Nellore section be opened for all traffic subject to the following proviso and restrictions:—

1st—That permission to open be not accorded until a certificate shall have been furnished by the Engineer-in-Chief to the effect that the matters enumerated in the Inspecting officer's paragraph 17, as essential for opening, have been actually completed.
2nd—The section will be opened for daylight running only for the present.
3rd—Maximum speed at any point must, for the present, be limited to 25 miles per hour.

Speed restrictions cannot be removed until the matters forming the subject of the Inspector's paragraph 19 have been attended to.

This recommendation covers also the short section of the East Coast (standard gauge) Railway lying between the opened East Coast and Nizam's (Bezwada extension) terminus at Bezwada, and mile 262·67 of the Bezwada-Madras Railway working section,—a point situated 2·74 miles from the centre of Bezwada passenger platform.

MADRAS,
7th December 1898.

FRANCIS J. E. SPRING,
Senior Govt. Inspector of Railways.

ORDER—No. 1516 Ry., dated 9th December 1898.

The report will be forwarded to the Government of India.

[Here enter No. 1517 Ry., dated 9th December 1898.]

(True Extract.)

FRANCIS J. E. SPRING,
Joint Secretary.

To the Engineer-in-Chief, Bezwada-Madras Railway.
„ Manager, East Coast Railway.
„ Agent, Madras Railway.
„ „ South Indian Railway.
„ Consulting Engineer for Railways.

Exd. T. K. Narayana Aiyangar.

BACK PAPERS.

Pren

43

SULTING ENGIN

Government (1898) of Madras.

PUBLIC WORKS.

Recd. } 1898. *Enclosures*

Regd. *Spare copies*

Letter, No. 1517 Ry., 9th December 1898.

DECEMBER.

Report of an Inspection, prior to opening, of the Bezwada-Nellore Section of the Bezwada-Madras Railway

Forwarding copy of Proceedings, containing the — by the Government Inspector of Railways, together with the Senior Government Inspector's remarks thereon.

PUBLIC WORKS DEPARTMENT.

Railway.

Letter—from

Francis J. E. Spring, Esq., C.I.E.,
Joint Secretary to the Government of Madras,
Public Works Department,
Railway Branch,

To

The SECRETARY to the GOVERNMENT of INDIA,
Public Works Department.

Sir,

With reference to the final paragraph of the report on the Bezwada-Madras Railway which reached you under cover of my No. 1376 Ry., dated the 8th November 1898, I am instructed to forward a copy of this Government's Proceedings, No. 1516 Ry., dated 9th December 1898, containing a report of an inspection, prior to opening, of the Bezwada-Nellore section of that railway, with the Senior Government Inspector's recommendations thereon.

2. As there is known to be a public demand for the opening of this section in time for the Christmas holidays, I am desired to express the hope that, on the receipt of the report, the Government of India may find themselves able to order its opening for traffic on the conditions and with the restrictions recommended by the Senior Government Inspector.

I have the honour to be,
Sir,
Your most obedient servant,
Francis J. E. Spring,
Joint Secretary.

Fort St. George,
9th December 1898.

Exd. T. K. Narayana Aiyangar.

43

2 Prew

CONSULTING ENGINEER FOR RAILWAYS MADRAS
RECEIVED
2 DEC 1898

5982
28.12.98

No. 1964 R.C.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

All communications should be addressed to the Secretary.

PLEASE REPLY TO ~~CALCUTTA~~ SIMLA.

To

The Senior Government Inspector,
for Railways, Madras.

Simla, the 22nd December 1898.

Sir,

In continuation of Public Works Department telegram No. 014 R.C. dated 14th December 1898 quoted on the margin I am directed to request that when the speed restriction imposed by the Senior Government Inspector has been removed the fact may be intimated for the information of the Government of India.

> "Your inspection report of "Bezwada Nellore and wire "49 B, provided you are "satisfied that paragraph 2 "Circular 6 of 1893, is not "infringed the sanction of "the Governor General in Council "to open the above line is "given under Section 18 Railway "Act.

S No 37

Seen
Office to note.
It will not be removed for some little time yet
JLd
30/12/98.

I have the honour to be,
Sir,
Your most obedient servant.

C. J. Cole
Offg. Under Secretary.

Documents accompanying.
Nil.

A.C.B.

Public Works (18

SERIAL

SERIAL
59

Form No. 7.

TELEGRAM ~~URGENT~~ ORDINARY ~~DEFERRED~~

38

FROM

R.

To Calcutta
Works

12 B × [illegible] Enmore Ga[illegible] under V. 1. (2) of Rules for [illegible] responsibility immediately after inspection subject to subsequent confirmation as there provided.

desp'd 14-2-99

14/2/99

SERIAL 60

Public Works (1899) Department.

Br. Ry **CURRENT No.** 224.

From
The Government of India
Br. Dept

Order

Telegram No. 039 R.C.

Dated 14. Feby 1899.
Received 15"
Registered
Enclosures
Spare copies

SUBJECT.

Opening of the Ennur Gudur Section of Br. R.

Authorising the — under chapter IV para 25 of the Indian Ry. Act.

BACK PAPERS.

No.	Date.

FURTHER PAPERS.

No.	Date.

JOINT SECRETARY TO GOVT. OF MADRAS RYS.
RECEIVED
15 FEB. 1899

4 8

flag B

T-14.

Class. AS **INDIAN TELEGRAPH.** Monthly Local No. 370

To Station Ms Triplicane
From Station Calcutta

Words.	Day.	Hour.	Minute.	Official Instruction.
36/7	14	17	12	Afd

To (Person) Works railway
From (Person) Works

1
2 + 039 r C your
3 wire 12 6 under
4 chapter four paragra
5 -ph 25 indian
6 railway act power
7 is delegated to
8 you to open ennur
9 gudur section
10 of bezwada madras
11 railway
12
13
14

TRIPLICANE 14 FE. 99

Recd. from L. N.
At Hrs. Mts. By

Sent to L. N.
At Hrs. Mts. By

Date

Postmaster.

Ongole [illegible] is back

Form No. 24.

No. 0578

5/8

No. 61

Madras, 15 - 2 - 1899.

From J. C. Lyle Esqre

~~The~~ SENIOR GOVERNMENT INSPECTOR OF RAILWAYS,

MADRAS,

Reminders.

To

THE AGENT AND MANAGER, M. RY
,, ,, S. I. RY.
,, ,, H. H THE N. G. S. RY.
,, ,, AND CHIEF ENGR., N. RY.
,, ,, S. M. RY.
,, ENGR-IN-CHIEF, B. M. RY.
,, MANAGER, E. C. RY.
,, SECRETARY TO THE GOVT. OF INDIA.

Reply No.________

dated________

SIR,

I have the honour to forward herewith the report prior to opening for passenger traffic of the Ennur-Gudur section of the Bezwada-Madras Railway. This report is submitted direct in order to save time. I have seen the Manager East Coast Railway who has arranged a suitable timetable & is ~~most anx~~ arranging to open on the 23rd subject to telegraphic sanction from the Govt. of India & subject also to any further restrictions which the Senior Government Inspector of Railways Madras may consider necessary.

I have etc J.C.L.

15.2.99.

Despd. 16.2.99

Note of an Inspection of the Ennur-Gudur section of the Bezwada-Madras Railway prior to opening for passenger traffic.

Length miles. Gauge standard 5' 6"

1. The inspection was made on the 15th February in company with the Engineer in Chief & Executive Engineer of the section.

2. Formation, Earthwork etc.
The section chiefly consists of low bank there being only two or three small cuttings. The banks are as a rule up to full width & having had at least two seasons of rain, one a very heavy one, are pretty well consolidated. Two small breaches took place near Sulurpet last season, & where the new bank has been thrown up subsidence may be expected as soon as rain falls.

3. Bridges & Culverts

Handrails on parapets are unnecessary. The longest span being 60 feet no special means of allowing for expansion are necessary. Girders are not held down to their bedplates by holding down bolts as was intended. I understand that arrangements a
made ha

fety platforms provided
enable workmen to escape from any approaching train, I do not consider that these are necessary on any other bridge in the section. Not less than 18 inches of earth has been allowed over all arches. The weak points in the provision of waterway for rivers were shown during last monsoon which was one of the heaviest on record. Breaches ~~took pl~~ occurred on both sides of the Kalinga Bridge owing to the ~~water~~ river flood breaching ~~the~~ its protection bunds, the question of providing additional waterway here is under consideration. No other breaches took place though ~~in~~ at the Swarnamukhi & Mamadi Kalwa bridges the flood was higher than had been expected. The road is carried on the top booms of all girders with cross sleepers resting directly on the girders. The main girders are in all cases properly braced together.

Fencing There is no fencing on the line. I understand that sufficient materials have been indented for to enclose station yards ~~only~~ & 100 feet on each side of more important level crossings.

Level Crossings Between Ennur & Naidupet all level crossings ...al guard rails. At ...

built. No gates have as yet been erected. None will ... across the line

Between Naidupet & Gudur, the level crossings are in a backward state, ~~many~~ one or two I noticed with sleepers instead of guard rails & several without even these. The road was in some cases above the level of the rails & a lot of levelling off will be necessary. These should have the Engineer's immediate attention

Mile & Gradient Posts Mileposts have been provided over most of the section but these can only be considered as temporarily erected as the zero point of the line has not been finally fixed as yet. Changes of gradients have been marked by gradient posts over part of the section. This work is in hand & will be completed. The telegraph poles are not numbered.

Ballast & Permanent-Way About half the section is ballasted with sand & about half with broken stone. As a general rule the ballast is sufficient & of good quality. A lot of work has been done since I last travelled over the line. Sleepers are of pynkado, sal & deodar, in all cases pynkado sleepers are placed next to the joints, no bearing plates are used but the sleepers next the joints are double spiked. I consider the sleepers of good quality. Proper allowance is made for expansion of rails. There are no curves sharp enough to necessi... of chai...

line. The running over nearly the whole of the section was excellent, very different to what it was when I was last over the line. ~~Bet~~ At Mile 48 where there is a temporary bridge & between Miles $50\frac{1}{2}$ & 53 where the banks were damaged by the recent heavy monsoon the line was not quite up to the usual standard. Between Naidupet & Gudur also the running was not very good. ~~In~~ In all other places it was quite as good as on most lines that have been opened for traffic for years.

Recommendations I recommend that the line be opened for passenger traffic under the following restrictions

(i) That a restriction of speed of 20 miles an hour be enforced at Mile 48 & between Miles $50\frac{1}{2}$ & 53.

(ii) That the stations mentioned as incomplete be only used as flag stations & the switches be spiked over for the through line till such time as [illegible] are in proper

---

Form No. 7.

98.

TELEGRAM URGENT ~~ORDINARY~~ ~~DEFERRED~~

No. 65

FROM E R.

TO Manager S. C. Ry.

24 Dx Be prepared for orders to open Gudur Ennore section on my receipt of Deputy Con. Engr. report tomorrow. I will then wire you fully.

F/ES

No. 535 $\overset{14-50}{}$ d/ 16/2/99. 16/2/99

Post copy to Engr-in-Chief B.M.Ry. Madras

16/2/99

Despd 16/2/99

Despatched on 16/2/99

Form No. 7.

108

TELEGRAM ~~URGENT~~ ~~ORDINARY~~ DEFERRED

SERIAL No. 66

FROM

Senior Govt. Inspector of Rys Madras

TO

Manager S.C.R.

Post copy to Engr in Chief B.M.R.

also copy by hand to-day to Major Gostelli who is staying at Mr Morris' house.

Also post copy to Agent M. Ry.

26 The Governor General in Council having delegated to me powers under Section 25 Railway Act I hereby under authority of Section 18 Sanction for opening Gudur Ennore section for all traffic subject to following restrictions. Speed 25 miles per hour as a maximum. Following stations Gummidipundi Arambaukam and Pedapariya to be used only as flag stations pending completion of signals and switches the points meanwhile being efficiently locked. Madras Railway Company have been directed to make good north points at Ennore. Speed from mile 48 to mile 53 limited to maximum 20 miles per hour. ~~This~~ Night running permitted everywhere between Ennore and Bezwada.

Desp. 17-2-99.

No. 547 17.2.99.

F.K.S. 17/2/99

Despatched on 17/2/99

H.E. for perusal

F.K.S.

I have told Major Constable that he may use a maximum of 30 where necessary to fit in with his already prepared timetable except at the places where speed is restricted to less than 25. and that on D.'s return I would ask for a report enabling me to do this officially throughout from Bezwada to Enmore. Resubmit on D.'s return

F.W.

18/2/99

Fr. 7 J.M

17/2/99

Licensed Telegraphs.

L. T. Form I.

MESSAGE FORM

CONSULTING ENGINEER FOR RAILWAYS
RECEIVED
17 FEB. 1899
3.37 PM
MADRAS.

SERIAL No. 67

CLASS. X.R. B. No. State Railway. Local No.

To (Station) Madras

From (Station) Bzy

No.	Words.	Time tendered for transmission. (Madras Time.) Day.	Hour.	Minute.	OFFICIAL INSTRUCTIONS.—
		17	1	5	

To (Person) Consulting Engineer for Railways

From (Person) Deputy Consulting Engineer for Railways

G.D.R. Bza Section the road is every where excellent running order Stations as a rule complete except palisiding between Ponnur & Tounder bank is being raised restriction of speed necessary as to managers request to be allowed to run at high speed

RECD. FROM (L. L.) SENT TO (L. L.)

tender first I pointed out that the state of the road does not effect the question there are few cattle but with turn tables at Guntur & Bitragunta and triangle Gudur should be no necessity to run tender first Ongole Station is back

gle

passes over traffic apparently large platforms today crowded and at several stations goods blocking up passenger platforms X

RECD. FROM (L. L.)	SENT TO (L. L.)
AT Hrs. Mts., on the	AT Hrs. Mts. on the
BY	BY

Date 17-2-99

Albert Smith
Signaller in charge.

Form No. 34.

68

P. W. D., RAILWAY BRANCH.

CONSULTING ENGINEER'S OFFICE.

Madras, ____________ 189 .

128

OFFICE NOTE.

From E. R.

To

Gudur - Bezwada section.

General. I travelled over this section by ordinary mixed train on the 16th February. The road was everywhere in excellent order & in its present state I do not consider any restriction of speed necessary. Between Ponnur & Tsundur stations, however, the bank is being raised with black cotton soil from the borrow pits & as the first shower of rain is certain to cause considerable, & probably unequal, settlement I consider it advisable to recommend a restriction of speed on this length. The stations as a rule were complete with the exception of the palisading

I noticed

this is a refreshment room station it is important that it should be pushed. The refreshment room at Bitragunta appeared to be working most satisfactorily.

Everywhere I found the Dist & Morse signals working well with the exception of Tsunder where the work of raising the bank has made it necessary to temporarily disconnect the distant signal.

Traffic. The traffic appeared considerable & one mixed train a day in each direction quite unequal to carrying it. Most of the stations were crowded & though probably most of the people were ~~sightseers~~ villagers who have not got over the novelty of a train it was evident that many were passengers & hard work some of them had to obtain seats. At some of the stations the passenger platform was very inconveniently ~~crowded~~ obstructed by goods.

Recommendation. I recommend that the restriction of speed ~~now imposed~~ on ~~this section~~ the Gudur-Bezwada section be ~~removed~~ raised to 30 miles an hour but I would recommend a restriction of speed of 20 miles an hour between Ponnur & Tsunder stations.

With the exception also of the restrictions specially noted for the Ennore-Gudur section I have no objection to a speed ~~of~~ which shall nowhere exceed 30 miles an hour being permitted over the whole line.

22/2/99.

Form No. 7.

13 P

TELEGRAM ~~URGENT~~ ~~ORDINARY~~ DEFERRED

No. 69

FROM The Senior Govt. Inspector of Rys Madras TO Manager E.C.Ry. Waltair

27 D. Government Inspector having submitted report on the state of whole section from Ennore to Bezwada I hereby raise the maximum limit of speed from the 25 miles ordered in my telegrams December 19 and February 17 to thirty miles per hour with following exceptions Miles 48 to 53 ~~maximum 20 miles per hour~~ and between Ponnur and Tsundur maximum speed 20 miles per hour. Report actual date of opening.

F.R.S.
22/2/99

Office. Now put everything in regular order. Quote previous G.O. also telegrams referred to, and print Mr. Taylor's latest report, also this telegram, and when Manager's report of date of opening comes, print that too, and wind up by a G.O. informing India. Treat the line from Ennore to Bezwada as a whole.

F.R.S.
22/2/99

Issue & return to me.
22/2

Despd
22/2/99

this is it

T–14.

578 | **INDIAN TELEGRAPH.** | Monthly Local No. 574

Class.

To ms Triplican

Station

Words.	Day.	Hour.	Minute.
11/11	22	14	7

CONSULTING ENGINEER FOR RAILWAYS
RECEIVED
23 FEB. 1899
MADRAS.

To (Person) Senior govt inspr rys

1006
23.2.99.

305 R C Government inspectors letter number 0518 dated nellore answering(1) his excellency the governor general in council is pleased under sections 18 and 19 of indian railways act to sanction opening for public carriage of passengers of ennur gudur section bantius(2) subject to conditions and restrictions recommended by govt inspector if confirmed by you being observed until such time as that officer after further inspection shall order that they may be relaxed.

(15th. instant)

14P

Till I know officially that the line has been opened I can do nothing.
Jld
23.2.99.

561

K

B.w.R

RECD. FROM L.N. SENT TO L.N.
AT Hrs. Mts. By AT Hrs. Mts. By
Date Postmaster.

TRIPLICANE
22 FE.
99

(1) 15th instant
(2) Bezwada–Madras Ry

this

158

INDIAN TELEGRAPH. | Monthly Local No.

To				From
Station				Station
Words.	Day.	Hour.	Minute.	Official Instruction.

To (Person)

From (Person)

VII

or removed in
the interest of
the public using
~~[illegible]~~ it please advise
engineer in chief
Bu.R. bantim³ and manager
E.C.R. esculens⁴ direct and
telegraph ~~[illegible]~~ actual
date of opening
sharp to simla

TRIPLICANE 22 FE 99

Recd. from L. N. Sent to L. N.
At Hrs. Mts. By At Hrs. Mts. By

Date Postmaster.

3. Bezwada-Madras Ry.
4. East Coast Ry.

Vide S. No 66 & 69.

1—15

T. 97. 500,000—8- 8.

MADRAS RAILWAY LICENSED TELEGRAPHS.

Class. **Service Message.** Local No. +

FROM (Station)

To (Station) Madras

No.	Words.	Time tendered for Transmission. Hour.	Minutes.	
+	17	11	9	Code. Date. 25 . 2 . 99

FROM (Person) Manager [illegible] R. C.

TO (Person) Consulting Engr

L/59 Gudur [illegible] section opened for passenger traffic yesterday

Recd. from L. L.
At hrs. mins., on the
By

Sent to L. L.
At hrs. mins., on the
By

Date

Signature.

Form No. 20.

TELEGRAM ~~Urgent~~ ~~Ordinary~~ Deferred

From ~~E.R.~~ Senior Govt. Inspector of Railways

To Works Simla

32 D/+ Ennore Gudur section of Bezwada (Bantius) Madras Railway was opened for traffic on 23rd instant.

28/2/99

Codify before copying

P.C. pr 28/2

Despd 28/2/99 2-40 P.M.

28/2/99

CONSULTING ENGINEER FOR RAILWAYS
RECEIVED
28 FEB. 1899
MADRAS.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.

RAILWAY CONSTRUCTION.

Print

Telegram No.305 R.C.

STATE MESSAGE DESPATCHED BY ELECTRIC TELEGRAPH.
On the 22nd of February 1899.

From-Works To-Senior Government Inspector of Rys.
From-Simla To-Madras.

Government Inspectors letter Number 0578 dated Nellore 15th instant. His Excellency the Governor General in Council is pleased under sections 18 and 19 of Indian Railways Act to sanction opening for public carriage of passengers of Ennur-Gudur section Bezwada-Madras Railway subject to conditions and restrictions recommended by Government Inspector, if confirmed by you, being observed until such time as that officer after further inspection shall order that they may be relaxed or removed in the interests of the public using it. Please advise Engineer-in-Chief Bezwada-Madras Railway and Manager, East Coast Railway direct and telegraph actual date of opening sharp to Simla.

1081.
28.2.99.

No.306 R.C.

Above copy forwarded by post to the Senior Government Inspector of Railways, Madras, with the remark that the inspection report of the section in question is subject to his confirmation, and the request that the usual documents prescribed by section I, paragraph 3, of the rules for the opening of a railway may be submitted at an early date.

2. It is further requested that the actual date of opening may be reported by telegram to this office.

3. It is also requested that when the speed restriction has been removed, the fact may be intimated for the information of the Government of India.

C. O. Cole

Offg. Under Secretary.

SIMLA;

The 22nd February 1899.

Form No. (2.)

G.O. to be printed

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ again the following :—

Quote
1 Duplicate

G.O. No 983-84 Ry dy 2-8-98
" " 1375-76 Ry dy 8-11-98
" " 1516-17 Ry dy 9-12-98

Read also the following:—

Telegram from Govt of India No 014 R-C dy 14-12-98
Letter from Engr-in-Chief, B.M. Ry dy 19-12-98
Telegram to Manager E. C. Ry dy 19-12-98
" from " " L 76 dy 22-12-98
" to Govt of India B 54 dy 23-12-98
Letter from Govt of India No 1964 R-C dy 22-12-98
Telegram to Manager E.C. Ry D 14 dy 2-2-99
" from " " L 7 dy 3-2-99
" to Govt of India B 12 dy 14-2-99
" from " " 039 R-C dy 14-2-99
Letter from J. C. Lyle Esq Govt Inspr to Govt of India No 0578 dy 15-2-99

Print

Telephone to the Agent & Manager M. Ry dy 16-2-99
Telegram to the Manager E.C. Ry D 24 dy 16-2-99
Copy of " " to Engr-in-Chief B.M. Ry No 535 dy 16-2-99
Telegram to the Manager E.C. Ry D 26 dy 17-2-99
Copy of " " to the Engr-in-Chief B.M. Ry, Major Constable and Agent M. Ry No 547 dy 17-2-99
Telegram from J. C. Lyle Esq to

Report by J. C. Esq Govt. Inspr dy 22-2-99

Telegram to the Manager E.C.R. 27 D dy 22-2-99

Telegram from Govt of Indi No: 305 R.C. of 22-2-99-

---

3 paos 1 Rs 9/3/99

No. 283 Ry., 10th March ~~February~~ 1899.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper:—

G.O., Nos. 1516-17, Ry., dated 9th December 1898.

Read also the following papers:—

From—The Secretary to the Govt. of India, P. W. Department.
To—The Senior Government Inspector for Railways, Madras.
Dated—Simla, the 22nd December 1898, No. 1964 R.C.

In continuation of Public Works Department telegram No. 014 R.C., dated 14th December 1898, quoted on the margin, I am directed to request that when the speed restriction imposed by the Senior Government Inspector has been removed, the fact may be intimated for the information of the Government of India.

"Your inspection report of Bezwada-Nellore and wire 49-B., provided you are satisfied that paragraph 2, Circular 6 of 1893, is not infringed; the sanction of the Governor-General in Council to open the above line is given under section 18, Railway Act."

Telegram from—The Joint Secy. to the Govt. of Madras, P. W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—14th February 1899, No. B./12.

Ennore-Gudur Section of Bezwada-Madras will be inspected to-morrow. As from recent unofficial inspection road is known to be in good order, will you delegate power to me under V. 1. (*b*) of Rules to open on my responsibility immediately after inspection subject to subsequent confirmation as then provided.

Telegram from—The Secretary to the Govt. of India, Public Works Department.
To—The Joint Secy. to the Govt. of Madras, Public Works Dept., Railway Branch.
Dated—Calcutta, 14th February 1899, No. 039 R.C.

Your wire B./12. Under chapter 4, paragraph 25, Indian Railway Act, power is delegated to you to open Ennore-Gudur Section of Bezwada-Madras Railway.

From—The Government Inspector of Railways, Madras.
To—The Secretary to the Government of India, Public Works Department.
Dated—15th February 1899, No. 0578.

I have the honour to forward herewith the report, prior to opening for passenger traffic, of the Ennore-Gudur Section of the Bezwada-Madras Railway. This report is submitted direct in order to save time. I have seen the Manager, East Coast Railway, who has arranged a suitable time-table, and is arranging to open, on the 23rd, subject to telegraphic sanction from the Government of India, and subject, also, to any further restrictions which the Senior Government Inspector of Railways, Madras, may consider necessary.

74.60

74 ~~pgdeo~~

No. 283 Ry., 16th March 1899.

Note of an Inspection of the Ennore-Gudur Section of the Bezwada-Madras Railway prior to opening for passenger traffic.

Length— *Miles. Gauge—Standard*, 5′ 6″.

1. The inspection was made on the 15th February in company with the Engineer-in-Chief and Executive Engineer of the section.

2. *Formation, Earthwork, &c.*—The section chiefly consists of low bank, there being only two or three small cuttings. The banks are, as a rule, up to full width and having had at least two seasons of rain, one a very heavy one, are pretty well consolidated. Two small breaches took place near Sulurpet last season and where the new bank has been thrown up subsidence may be expected as soon as rain falls.

3. *Bridges and Culverts.*—Handrails or parapets are unnecessary. The largest span being 60 feet, no special means of allowing for expansion are necessary. Girders are not held down to their bedplates by holding down bolts as was intended. I understand that arrangements are being made for fixing the bolts. The Ennore bridge, 30 spans of 40 feet, has safety platforms provided to enable workmen to escape from an approaching train. I do not consider that these are necessary on any other bridge in the section. Not less than 18 inches of earth has been allowed over all arches. The weak points in the provision of waterway for rivers were shown during last monsoon which was one of the heaviest on record. Breaches occurred on both sides of the Kalinga bridge owing to the river breaching its protection bunds, the question of providing additional waterway here is under consideration. No other breaches took place, though at the Swarnamukhi and Mamadikalva bridges the flood was higher than had been expected. The road is carried on the top booms of all girders with cross sleepers resting directly on the girders. The main girders are in all cases properly braced.

4. *Fencing.*—There is no fencing on the line. I understand that sufficient materials have been indented for to enclose station yards and 100 feet on each side of more important level crossings.

5. *Level Crossings.*—Between Ennore and Nayudupeta all level crossings have external guard rails. At the more important crossings gatekeepers' lodges have been built. No gates have as yet been erected. None will close across the line. Between Nayudupeta and Gudur the level crossings are in a backward state, one or two I noticed with sleepers instead of guard rails and several without even these. The road was in some cases above the level of the rails and a lot of levelling off will be necessary. These should have the Engineer's immediate attention.

6. *Mile and Gradient Posts.*—Mileposts have been provided over most of the section, but these can only be considered as temporarily erected, as the zero point of the line has not been finally fixed as yet. Changes of gradients have been marked by gradient posts over part of the section. This work is in hand and will be completed. The telegraph poles are not numbered.

7. *Ballast and Permanent-way.*—About half the section is ballasted with sand and about half with broken stone. As a general rule the ballast is sufficient and of good quality. A lot of work has been done since I last travelled over the line. Sleepers are of pynkado, sal and deodar; in all cases pynkado sleepers are placed next to the joints, no bearing plates are used but the sleepers next the joints are double spiked. I consider the sleepers of good quality. Proper allowance is made for expansion of rails. There are no curves sharp enough to necessitate the use of check rails.

8. *Station Buildings, Platforms, &c.*—The following stations are practically complete in all respects: Minjur, Ponneri, Tada, Sulurpetta, Dhoravari Chattram, Nayudupeta, also the flag stations. The state of the remaining stations is as follows. *Ennore.*—I found the signals and points not in working order; these had not been handed over by the Engineering Department who have been erecting the new List and Morse signals to the Traffic. When I saw them the points would not work and the connecting rod had to be detached from the points before the engine could be passed over. This matter will receive the immediate attention of the Madras Railway

Engineers, who are responsible for the work. *Gummidipundi.*—Signals not ready, loop not yet put in; platform is on loop; station house complete; rail level platform complete. I recommend that, for the present, this be only used by slow trains as a flag station. *Arambakkam.*—Signals not ready, loop not laid; switches and crossing only put in. The platform is sufficiently completed for the use of passengers: this may be used as a flag station by slow trains; switches must be kept spiked over. *Pedapariya.*—Loop not quite complete, signals not ready; platform, which is on loop, is ready. Until signals are ready this can only be used as a flag station and switches should be spiked over.

9. *Signals.*—These are all of the List and Morse type interlocked with the points. I have dealt fully with the state the work of erecting them is in under my remarks under unfinished stations. Where completed they seem to work most satisfactorily and the staff understand the use of them. At Ponnéri I noticed that the north home signals were not visible from the distant signal, the view was obstructed by a tree; this should be rectified. Distant signals show danger and caution only both by day and night. Signal lamps are arranged so as to show a green back light when on and a white light when off.

10. *Points and Crossings.*—All these are of good design and workmanship; they are properly laid and work correctly.

11. *Turn-tables.*—There is a turn-table at Ennore and a triangle at Gudur.

12. *The Road.*—The running over nearly the whole of the section was excellent, very different to what it was when I was last over the line. At mile 48, where there is a temporary bridge, and between miles 50½ and 53, where the banks were damaged by the recent heavy monsoon, the line was not quite up to the usual standard. Between Nayudupeta and Gudur also the running was not very good. In all other places it was quite as good as on most lines that have been opened for traffic for years.

13. *Recommendations.*—I recommend that the line be opened for passenger traffic under the following restrictions:—

(i) That a restriction of speed of 20 miles an hour be enforced at mile 48 and between miles 50½ and 53.

(ii) That the stations mentioned as incomplete be only used as flag stations, and that their switches be spiked over for the through line till such time as the signals are in proper working order and interlocked with the points.

Telegram from—The Consulting Engineer for Railways, Madras.
To—The Manager, East Coast Railway.
Dated—16th February 1899, No. D./24. (Copy, No. 535, to Engr.-in-Chief, B.M. Ry.)

Be prepared for orders to open Gudur-Ennore Section on my receipt of Deputy Consulting Engineer's report to-morrow. I will then wire you fully.

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Manager, East Coast Railway.
Dated—17th February 1899, No. 26 D. (Copy, No. 547, to Engr.-in-Chief, B.M. Ry.)

Governor-General in Council having delegated to me powers, under section 25 Railway Act, I hereby, under authority of section 18, sanction your opening Gudur-Ennore Section for all traffic, subject to following restrictions: Speed 25 miles per hour as a maximum; following stations—Gummidipundi, Arambakkam and Pedapariya to be used only as flag stations pending completion of signals and switches, the points meanwhile being efficiently locked. Madras Railway Company have been directed to make good north points at Ennore. Speed from mile 48 to mile 53 limited to maximum 20 miles per hour. Night running permitted everywhere between Ennore and Bezwada.

of/ **Telegram from**—The Government Inspector ~~for~~ Railways, Madras.
To—The Consulting Engineer for Railways, Madras.
Dated—17th February 1899.

East Coast Railway, Gudur-Bezwada Section. The road is everywhere in excellent running order; stations as a rule complete except palisading. Between Ponnur and Tsundur bank is being raised; restriction of speed necessary. As to Manager's request to be allowed to run at high speed tender first, I pointed out that the state of the road does not affect the question, there are few cattle; but with turntables at Ennore and Bitragunta and triangle Gudur should be no necessity to run tender first. Ongole station is backward; passenger traffic apparently large; platforms to-day crowded, and at several stations goods blocking up passenger platforms.

REPORT of the Government Inspector of Railways, Madras, dated 22nd February 1899.

Gudur-Bezwada Section.

– Nellore /

General.—I travelled over this section by ordinary mixed train on the 16th February. The road was everywhere in excellent order and, in its present state, I do not consider any restriction of speed necessary. Between Ponnur and Tsundur stations, however, the bank is being raised with black cotton soil from the borrow pits, and as the first shower of rain is certain to cause considerable and probably unequal settlement, I consider it advisable to recommend a restriction of speed on this length. The stations as a rule were complete with the exception of the palisading. Ongole station I noticed was backward and, as this is a refreshment-room station, it is important that it should be pushed. The refreshment-room at Bitragunta appeared to be working most satisfactorily. Everywhere I found the List and Morse signals working well with the exception of Tsundur where the work of raising the bank has made it necessary to temporarily disconnect the distant signal.

Traffic.—The traffic appeared considerable, and one mixed train a day in each direction quite unequal to carrying it. Most of the stations were crowded, and though probably most of the people were villagers who have not got over the novelty of a train, it was evident that many were passengers and some of them had hard work to obtain seats. At some of the stations the passenger platform was very inconveniently obstructed by goods.

Recommendation.—I recommend that the restriction of speed on the Gudur-Bezwada Section be raised to 30 miles an hour, but I would recommend a restriction of speed of 20 miles an hour between Ponnur and Tsundur stations. With the exception also of the restrictions specially noted for the Ennore-Gudur Section, I have no objection to a speed which shall nowhere exceed 30 miles an hour being permitted over the whole line. X

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Manager, East Coast Railway, Waltair.
Dated—22nd February 1899, No. 27 D.

Government Inspector having submitted report as to state of whole section from Ennore to Bezwada, I hereby raise the maximum limit of speed from the 25 miles ordered in my telegrams, December 19th and February 17th, to 30 miles per hour, with following exceptions: miles 48 to 53 and between Ponnur and Tsundur maximum speed 20 miles per hour. Report actual date of opening.

Telegram from—The Secretary to the Government of India, P.W. Department.
To—The Senior Government Inspector of Railways, Madras.
Dated—Simla, 22nd February 1899, No. 305 R.C.

Government Inspector's letter No. 0578, dated Nellore, 15th instant. His Excellency the Governor-General in Council is pleased, under sections 18 and 19 of Indian Railways Act, to sanction opening for public carriage of passengers of Ennore-Gudur Section, Bezwada-Madras Railway, subject to conditions and restrictions recommended by Government Inspector, if confirmed by you, being observed until such time as that officer, after further inspection, shall order that they may be relaxed or removed in the interest of the public using it. Please advise Engineer-in-Chief Bezwada-Madras Railway and Manager East Coast Railway, direct, and telegraph actual date of opening sharp to Simla.

Memorandum from—The Secretary to the Government of India, P.W. Dept.
To—The Senior Government Inspector of Railways.
Dated—Simla, 22nd February 1899, No. 306 R.C.

Above copy forwarded by post to the Senior Government Inspector of Railways, Madras, with the remark that the Inspection Report of the section in question is subject to his confirmation, and the request that the usual documents prescribed by section I, paragraph 3, of the rules for the opening of a railway may be submitted at an early date.

2. It is further requested that the actual date of opening may be reported by telegram to this office.

3. It is also requested that when the speed restriction has been removed, the fact may be intimated for the information of the Government of India.

Telegram from—The Manager, East Coast Railway.
To—The Consulting Engineer for Railways, Madras.
Dated—24th February 1899.

L. 51. Gudur-Ennore section opened for passenger traffic February 23rd.

Telegram from—The Senior Government Inspector of Railways, Madras.
To—The Secretary to the Government of India, Public Works Department.
Dated—28th February 1899, No. 32 D.

Ennore-Gudur section of B.M. Ry. was opened for traffic on the 23rd instant.

Order—No. 283 Ry., dated 10th March 1899.

A copy of these proceedings will be forwarded to the Government of India for information, with reference to their letter No. 306 R.C., dated the 22nd February 1899. The documents called for in that letter have already reached the Government of India with this Government's letter No. 1517 Ry., dated the 9th December 1898.

[Here enter No. 284 Ry., dated 10th March 1899.]

(True Extract.)

Francis J. E. Spring,
Joint Secretary.

To the Manager, East Coast Railway.
" Engineer-in-Chief, Bezwada-Madras Railway.
" Agent and Manager, Madras Railway.
" Consulting Engineer for Railways.

Exd. T. K. Narayana Aiyangar.

Endorsement—No. 284 Ry., dated 10th March 1899.
Forwarded.
(By order.)

Joint Secretary.

9/3/99

22/3/99

To His Excellency

Despatched on 24/3/99