

CONCERNS BOTH BRITISH INDIA
AND INDIAN STATES.

Public Works (1898) Department.

RAILWAY BRANCH.

G.O., No. 966-67R

[Despatch Abstract.]

Inspection Report of His Highness the Vizier's Guaranteed
State Railway including the Bezwada Extension.

The Senior Government Inspector's — for the half-year ending the 30th June 1898, communicated to the Agent & Managers for information & necessary action, and a copy of the Proceedings forwarded to the Govt. of India.

Now sending for information, a copy of Proceedings
embodying the Senior Government Inspector's
— for the half-year ending the 30th June 1898.

Secy of H. E. 24-7-98
 " " Lieut. H. Atkins 25-7-98
 " " The General 26-7-98
 " " 7/98

Forwarding, for information, a copy of Proceedings embodying the Senior Government Inspector's — for the half-year ending the 30th June 1898.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

**HIS HIGHNESS THE NIZAM'S GUARANTEED STATE
RAILWAY.**

STANDARD GAUGE 5' 6".

Mileage open for traffic (including "Bezawada Extension" in British Territory, 22 miles),
354 miles.

INSPECTION REPORT FOR THE HALF-YEAR ENDING 30TH JUNE 1898.

1. The inspection was made on July 2nd to 5th, in company with the Agent, the Chief Engineer, and where necessary the Company's other officers.
2. *General.*—I was told that the Company are about to make an offer to buy the Bezawada extension from Government. Should this be agreed to they would have a compact self-contained system of their own, between two important junction stations, and things would be generally simplified. I can see no objection to the proposal from any point of view.
3. *Formation.*—All in very good order. Some trees ought to be cut down round the curve near mile 58. Some improvement of grading and raising of banks is going on between Chintakani and Bonakalu; much of this re-grading is still unballasted, but all is in progress. More work of the same sort has been complete at miles 158, 159 and 168.
4. *Bridging.*—(a) *Weak Warren girders.*—Only 26 spans now remain to be replaced, and it is said that these will all be finished during next cold weather.
(b) *Garla bridge—mile 257.*—Eight spans of 60 ft. plate deck girders want re-sleepering.
(c) *Culverts.*—At mile 168/4, 3 spans of 3 ft. culvert have been put in, in lieu of a drain pipe. Some addition to culverts is being made between Chintakani and Bonakalu. The East Coast Railway authorities propose to put in one 20-ft. span just beyond Kondapalli; it is a year now since I pointed out the need for this.
(d) *Utilising old Warren girders.*—The Hyderabad Public Works Department have utilised 5 spans of old 60 ft. railway Warren girders on a road bridge near railway mile 111. The rail, stone, concrete, and moorum roadway seems quite unnecessarily heavy: planking would be amply strong enough. There are 14 feet 6 inches clear between the girders, which is plenty for any District road. The Railway Company are selling these girders at Rs. 100 per ton, but would probably be glad to get Rs. 80. The matter is well worth the attention of Local Boards and the Madras Public Works Department.
5. *Causeways on the Bezawada extension.*—I advised about these in the last two half-yearly reports. I repeat here again that the pernicious causeways near mile 330 ought to be closed at once. They serve no useful object and are only potential sources of mischief. Then the gradient ought to be raised from mile 329 to mile 332/4 and the only waterway to be given in this section should be the one 20 ft. culvert at mile 331, which ought to be strongly floored, drop-walled, and pitched. These

measures will have the effect of preventing the Budameru water from crossing the line. As I said before, the Budameru water does not in the very least want to cross the line, and if prevented from doing so by the above measures it will flow off quietly to the east where it desires to flow.

Then we come to the possibility of Kistna overflow. The chances of this are now much reduced since the Irrigation Department have strengthened their river levees. But if these should unfortunately fail, the old causeway between mile 332/4 and 333/5 and the new causeway between mile 332/19 and 334, a total length of nearly 9,700 feet, ought to very amply suffice to carry off the flow from any probable breach. The East Coast Railway authorities are now blending these two causeways, the old and the new, into one, very properly: and all that will then remain to make a good job of the Kistna-Budameru flood problem will be to raise the gradient from 229 to 332/4 as above recommended, thereby blocking up the very mischievous causeways at mile 330, and to strengthen the one 20 ft. culvert.

6. *Rails.*—The road is very good and fit for any speed, the 22 miles of old rails are still in the road. They are said to cause some breakage of pots near the joints. I think the Agent would rather not change them until he has completed his girder renewals. They have three or four years life in them yet, but might gradually be replaced.

7. *Sleepers.*—There are 48 miles of pot sleeper road, the rest is pea-pod steel sleepered. The latter are standing very well; very little corrosion. The pots carry double, or bull-headed, rails, and the pea-pods flat-footed rails. The pot road takes 8 gangmen for 3 miles and the steel road 6.

8. *Ballast.*—I would here repeat what I said on last inspection about covering the sand ballast. It will pay to get on with it more quickly.

9. *Stations.*—The general practice at third-class stations throughout the line is to have the goods stored on the passenger platform under the stationmaster's own eye. A plank stretching across the platform line, from wall to wagon, serves for loading and unloading. Frequently the open waiting sheds are used for goods under the eye of the Police at small stations. I see no objection. At *Gangawaram* they are doubling the goods shed. I think a passenger waiting shed is wanted here. At Hyderabad an extension 50' x 50' is being made to the third-class waiting shed. There is also a large pen on the platform for marshalling third-class passengers. At several stations flat masonry roofs have been put on the booking offices in lieu of the hot corrugated iron. At *Alir*, the road from the bazaar passes through a pool of slush in the station yard; this should be remedied; here more goods shedding seemed wanted. The new plan of Dornakal station yard is approved; this useful improvement ought to be put in hand now; it will pay well, and is wanted also in the interests of the public. At *Bonakalu*, the ashpit is cracking, but as they don't water here, it may be filled up.

10. *Trimalgherry troop siding.*—They have put in three steel sleepers per rail in the curves, and with this patching up the siding may continue to be used for slow speeds. The Company and the Military authorities have been a long time coming to an agreement about this siding.

11. *Yellandu branch.*—This is in very good order. At Yellandu station it has been decided to build a weigh bridge, a new siding, an ashpit, and some new staff quarters for signallers.

12. *Rolling-stock.*—This seemed to be well maintained. The new coal waggons carry 436 maunds with 188 maunds tare, or 11½ tons on a pair of wheels. The old waggon carried only 315 maunds for 172 maunds tare. This question of coal waggon loads is of great importance to the Company, as coal now forms considerably over half of the weight of their public traffic, and furnishes nearly half of their earnings. The six wheel coupled engine with bogie is reported to be an excellent engine. It works freely on 1,320 ft. curves. The shop arrangements are good.

13. *Dutton's interlocking gear.*—I inspected this at Golaguda. It works quite satisfactorily and the stationmaster understands it. But they might just as well have given it a better chance by putting it on the straight, a couple of rail length further out, instead of on a curve, at the north end of the station.

No. 966 Ry., 28th JULY 1898.

14. *New station.*—At mile 111 it is proposed to give a new station where the carriages of Secunderabad people may meet them, so that they will not be under the necessity of going round by Hyderabad. This will be a great convenience. It is approached by a good road. It will only be a stopping station, no sidings. It will only be a mile from the outskirts of Secunderabad.

15. *Working Results.*—The following figures will be of interest. They are taken from the Director's report for 31st December 1897. They refer to the entire length from Bezwada to Wadi:—

	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
Mean mileage worked	349	354	354	354	354	354	354	354	354
Gross earnings Rs.	23,34,133	25,82,000	27,76,438	27,80,642	28,60,069	32,56,885	34,11,308	34,57,844	37,77,153
Working expenses	15,44,114	16,23,720	14,88,521	14,26,775	13,89,646	15,63,587	17,39,039	16,56,592	17,57,576
Net earnings	7,90,019	10,58,280	12,87,917	13,53,867	14,70,423	16,93,298	16,72,269	18,01,252	20,19,577
Sterling exchange at which Net earnings are converted	1/5 1/2	1/5 1/2	1/4 1/2	1/2 1/4	1/2 1/4	1/2 1/4	1/2 1/4	1/2 1/4	1/3 1/4
Net earnings in sterling .. £	56,031	77,896	87,777	82,835	89,012	92,834	98,740	109,844	134,381
Percentage of working expenses on gross earnings	66.15%	59.01%	53.61%	51.31%	48.59%	48%	50.97%	47.91%	46.53%

16. *Conclusion.*—The inspection train ran at a speed of up to 53 miles per hour over many parts of the road, which is all round in excellent condition.

MADRAS,
13th July 1898.

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

ORDER—No. 966 Ry., dated 28th July 1898.

Communicated to the Agent and Manager, His Highness the Nizam's Guaranteed State Railway, for information and necessary action.

2. A copy of these Proceedings will be forwarded for the information of the Government of India.

[Here enter No. 967 Ry., dated 28th July 1898.]

(True Extract.)

FRANCIS J. E. SPRING,
Joint Secretary.

To the Agent and Manager, H.H. the Nizam's G.S. Railway.
" Resident at Hyderabad, with C.L.
" Manager, East Coast Railway.
" Consulting Engineer for Railways.
" Public Works Department,
" Local and Municipal Department, } with reference to paragraph 4 (d).

ENDORSEMENT—No. 967 Ry., dated 28th July 1898.

Forwarded.

(By order.)

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Exd. Shaik Karim.

RAILWAY.

Government {1898} of Madras. PUBLIC WORKS.

Recd.

Regd.

1898.

Enclosures.

Spare copies

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