

Public Works (1893) Department.

RAILWAY BRANCH.

G.O., No. 1445R

DATED 16th December

[Despatch Abstract.]

Land. — Notification for the acquisition of additional — the permanently acquired at Donakonda on the Bellary-Hisua State Railway for improvement of the sanitary condition of the station yard, ordered to be published in the Fort St. George gazette.

BACK PAPERS.

[illegible]

FURTHER PAPERS.

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

Re 106-7-9-93.

REVENUE DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read Evidence of the Public Works

Department (Railway Branch) 21/9th September 1873 No. 814 D.
 Licenses for favor of necessary action, ^{the following} letter from the Govern-
 = ment of Bombay, 21/9th September 1873 No. 1812 of 1873.

I am directed to forward for favor of the issue of the necessary orders, a copy of letter no. 7011-12024, dated 9: ultimus from the Agent Southern Maharashtra Railway Company, together with plans & schedules for additional lands proposed to be acquired permanently at Dona Bonda on the Bellary-Mishra Railway for the improvement of the sanitary condition of the Station yard.

Order thereon 15. September 1893 No. 3402.

Communicated to the Commissioners of
Land Revenue with a view to necessary action being taken.

(Free Extract)

To
 The friends of L.R.
 with the Enslaved.

(True 6/23)

10/23
Rice
Under Secretary to Govt.

Govt. of {189 } Madras.
REVENUE.

To

Dated

Recd.

Encl.

Mis. G.O., 189 , No.

SUBJECT.

no. 1445 R 16-12-93

NELLORE COLLECTOR'S OFFICE,

6th December 1893.

DESP.

1-12-93

No. 973
Comp.

From B. D. Maclean Esquire
Collector of Nellore.

To the Joint Secretary to Government,
Railway
P. W. D., Irrigation Branch,
Madras.

Sir,

I have the honor to submit under section 6 of Act X of 1870, for publication in the Fort
Saint George Gazette, draft declaration and schedule for lands required for the Railway

Station at Bonakonda, Bersi Br.

and to request that the Sub Collector, Nellore
may be authorized to take order for the acquisition of the land.

2. As the lands appear to be urgently
required, permission is requested
to enter upon the same under Sec 17 of
the Act.

I have the honor to be,

Sir,

Your most obedient servant,

[Signature]
Collector.

[Comp.; 19-8-92.]

Copy file.
Copy 7/1/94

10543

From the Collector of
Nellore.

To the Joint Secretary to
Government, ~~P. W. D.~~
~~Irrigation Branch,~~
Railway Br. Madras.

Dated 6th December 1893

No. 973
Camp
Dec: 11.12.93
En. 107

Subject.

Draft declaration and schedule under Act X of
1870 for publication in the Fort Saint George Gazette.

B.

No 1445 Rdf 16-12-93.

B.

No 1445 Rdf 16-12-93

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

Letter from the Collector
of Nellore } H.E. No. 973 dated 6 December 1893
Camp

The notification as amended by Govern-
ment is approved and will be published in the
Fort St. George Gazette.

Imm

D. R.

To
The Causing. Engr. for Ry. Branch interref to letter no 1812
Collector of Nellore 1-9-93
Notification to Press. 18/12

1

J. C. 19.211

J.C. 19.811

Government {1902} of Madras.
REVENUE.

Recd.

Regd.

} 1902.

Enclosures

Spare copies

G.O., No. 561, 30th June 1902.

JUNE.

Inspection report of the South Indian Railway.

Ordering that the Collectors of Tanjore and Coimbatore be called upon to explain the delay in handing over certain lands required for the railway in Pulliarpatti and Puliur, and that all Collectors be instructed to take immediate steps to recover possession of railway lands encroached upon when such cases are brought to their notice by the railway authorities.

GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

READ—the following Proceedings of the Government of Madras, Public Works Department, No. 477, Railway, dated 15th March 1902:—

SOUTH INDIAN RAILWAY.

METRE GAUGE.

TOTAL MILEAGE OPEN FOR TRAFFIC 1,087.71 MILES.

Inspection Report by Captain G. R. Hearn, R.E., Government Inspector, for the half-year ending 31st December 1901.

Main Line and Branches.

This inspection was carried out between the 10th and 18th January 1902. The Agent was unable to be present from the 10th to the 14th owing to ill-health, but accompanied the train for the remainder of the inspection. Heads of Departments were present throughout and all District officers over their respective lengths.

1. The running over the greater portion of the line was fair to good, but I cannot describe it as first class, and I would draw attention to the following points which require careful correction:—

(a) The cross-levels are frequently out, causing side oscillation. I found as much as $\frac{3}{8}$ " difference on the straight in one place.

(b) The superelevation on curves is not given evenly throughout and there are "kinks" in several places. Where level crossings occur on curves there is frequently a lurch.

(c) The lining and top over girder bridges are not well maintained, and I have noted ten specially requiring attention, viz., at miles 62/2, A 54/3, the Gadalam bridge, 126/16, the old Coleroon bridge, 195, the Vaigai bridge, 383/92, 389/15, 431/9.

(d) There is often a drop on the abutments owing to bad packing of sleepers, and I recommend for consideration the provision of wooden instead of pot sleepers for a rail length each side of girder bridges.

But the first 2 miles out of Egmore, the old road on the Pondicherry branch, from Kulikarai to Saliyamangalam on the Negapatam branch, and the line between the Vaigai bridge and Tuticorin, with the exception of the length between mile 360 and Sattur, are in bad running order. I am of opinion that it is now beyond the power of the maintenance gangs to restore the condition of the last mentioned length and recommend that strong special gangs of about 20 men each should be put on to open up and go thoroughly through the line. I am aware that the soil is of the black-cotton variety, but the line is an old one, and can be properly maintained, as the running between mile 360 and Sattur is good. Some stringent measures, including the replacement of inefficient maistries, seem to be demanded.

The running over causeways was not good. The recently relaid road near Tiruvallur on the Negapatam branch is in poor order. And the appearance of the road generally indicates to my mind an absence of that minute attention to detail, which alone makes a good running road.

2. STANDARD DIMENSIONS.—I noted the following infringements:—

Beach Station Goods-shed door.—The sides of this are only 5' from centre line, infringing the dimension given in chapter I, paragraph 18, by no less than 18" on each side.

Sikkil.—The palisading has been carried across to 4' 3" from the edge of the platform at the end.

There are several new trial stations also (and Sikkil is one), at which the palisade fencing at the back is within 18' from the edge of the platform, and previous sanction has not apparently been obtained to this infringement. Moreover I believe that the Acting Chief Engineer is under the impression that no previous reference to the Senior Government Inspector is necessary to reduce dimensions from those shown in table B to those in table A, but Circular No. IV Ry. of 1899 is very clear on this point. I am of opinion that many infringements have consequently taken place in recent years without previous sanction being obtained.

On the Erode tranship platform the columns of the roof are 6' only from the edge. Chapter II, paragraph (11), seems to fix this dimension as a minimum for all platforms, but I do not know if this really applies to goods platforms or whether previous sanction was obtained to reduce the distance within 10 feet.

3. BANKS AND CUTTINGS.—These were in good trim and of good section, except at one or two places a few miles south of Madura where banks require making up.

4. BRIDGES AND CULVERTS.—The weak pin-connected bridges are now well looked after and defective straps replaced where necessary. The cracks are very minute, but the new straps are put on whenever the cracks exceed $\frac{1}{4}$ " in length. I inspected the Ponnai, old Vellar, and new Coleroon bridges of this type. The Piers of the first named require pointing. I do not think that the fact of the girders of the old Vellar bridge resting on only seven rollers at one end is of much moment; the alteration will be troublesome, and the bridge has stood well for years.

At 49/3 some of the 40-foot girders require repainting.

At 111/12 there is a crack near the newel of one wingwall.

At 201/5, three 30' spans, the river is cutting in behind the south abutment and the waterway is restricted as shown by "eddy scours" both above and below the bridge. This bridge should be extended.

E 292/18, seven 12' spans, girders require resleepering and chairs re-spacing. The "creep" has brought the ends of fishplates up against the chairs and the keys cannot be properly driven in.

The girder bridges and culverts generally are maintained in good order, with the exception of the "top" previously referred to.

The arched culvert at mile 36/3 on the Arkonam branch referred to in the previous report has been rebuilt.

5. BALLAST.—Appears to be of full section throughout and of a nature well suited to the pot sleepers, but in places some of the soil from the banks has got mixed in.

6. RAILS AND FASTENINGS.—The main line from Madras to Tuticorin is laid with 50 lb. bullheaded rails in pot sleepers, and this should make an excellent road if maintained in good condition with due attention to the points alluded to in paragraph 1. The rails are 30' long as a rule, but in relaying the line the short rails sent out for use in curves, etc., seem to have been forgotten until the end of the relaying, when all the short rails were put in together. This gives the noisy running noticeable near Mayavaram and at 390/8-10.

The old 40 lb. road between Conjeeveram and Chingleput is in very fair order, but the joints are weak. On the Pondicherry branch the 40 lb. rails are being gradually renewed, but at rather a slow rate.

The old broad gauge 68 lb. road between Tiruvallur and Kulikarai has many rough rails, and between the latter station and Saliyamangalam the running is not good. These old rails have been in the road here and on the Erode branch for nearly forty

years and are still doing good service, but the rate of renewal might well be increased, and it would be interesting to know how many lb. per yard these rails have lost. Some on the Erode branch certainly ought to come out at once.

The 52 lb. steel bullheaded rail which has replaced the 68 lb. iron is of excellent type, and the road in very good order.

7. SLEEPERS.—The feature of the South Indian Railway is the general use of pot sleepers; the present ones are in such good condition that new ones are not likely to be required for years.

8. LEVEL CROSSINGS were, as a rule, neatly kept. "Self-closing" gates are erected at unimportant crossings only, and the practice of tying them back, which no doubt is very common but of which I only saw one instance, is not attended with much danger. The important crossings have a gate-keeper. The gate lodges are of a very cheap type and look tumbled down, but no doubt are quite good enough.

Some of the level crossings, for instance, one at 207/8, might well be closed, or, if they are necessary, the approaches should be kept in better repair outside railway limits. At 104/11 on the Pondicherry branch, no self-closing arrangement is fitted and the gate was open.

The crossing at mile 165/15 requires repair.

The interlocked level crossing on the Marina now works quite smoothly.

9. FENCING.—The live fencing over many miles is in a bad condition, and the soil is said to have been so much impoverished that new shoots will not thrive. The substitution of wire fencing is being proceeded with, but want of capital funds prevents much being done in this way. The whole might be done from Revenue for which there is a precedent.

Over certain lengths the wire fencing is not well maintained, viz., 120 to 125, Tiruvallur to Negapatam, Kulikkarai to Saliangalam.

The type of wire fencing has only four strands of wire with straining posts and standards which does not seem as good and strong as the State Railway pattern with five strands. The latter may be more expensive but must be more efficient.

10. ROLLING-STOCK.—The locomotives on this line are always kept clean and bright, and the only point I would allude to about other stock is that the third-class carriages being only varnished soon get a dingy appearance. I noticed that many of these which had been only out of the shops a few months looked as if they ought to go in again for varnishing, and I am inclined to think that a brown paint would last longer and look smarter.

Thirty locomotives, 42 coaching and 115 goods vehicles were reported to be in the shops for repair on the date of my inspection on the 15th. This gives a percentage of about 14, 5 and 3 of the total stock constructed under the respective heads.

The coaching stock is at present poorly lighted, but the electric light will be fitted on the mail trains before the next inspection.

I tested the electric communication at Villupuram on the mail train of the 12th and found it did not work properly through the train. I understood that a vehicle had been cut off at the rear, and would recommend that the communication be tested before starting the train again in all cases where the engine or a vehicle is detached. It is the custom for guards and drivers to exchange signals through the medium of the electric communication, which is a good practice, but in such cases it is better to test also before starting as any defect can then be made good. A notice might be put up in carriages to tell the passengers to press the button several times as one ring on the bell might not attract the driver's attention.

The relief train at Villupuram is very completely fitted up, as is also a bogie ambulance carriage which I inspected.

Latrine accommodation is provided for females in the third-class carriages set apart for them, but I notice that females frequently travel in other carriages, preferring apparently to be with their male relatives.

The ground-nut traffic this year has made a heavy call on the goods stock and even ballast trains have been withdrawn. It is a question whether the quantity of this stock should not be increased.

11. STATIONS.—Considering the fertility of the country, the dense population and the large festival and goods traffic, the stations, as a whole, appeared to me to be capable of considerable extension and improvement; but, under the system which necessitates the charging of such improvements to the capital account, the small budget allotments do not allow of improving other than the most important junctions. The Tanjore station alterations alone mean an outlay of half as much as has been allotted for next year. Without entering into financial questions I would only suggest that, as long as a dividend of 5 or even 6 per cent. is assured, the balance of net earnings might well be spent on works.

Egmore station for instance, as it is at present, is not worthy of a Presidency town. The new station is to be taken in hand at an early date, but the outlay must prevent the undertaking of other very necessary improvements.

12. SANITATION.—One question which I would bring specially forward is that of the waiting and refreshment room and latrine accommodation. The first two are being gradually improved, and the introduction of white glazed tiles in bath-rooms and cook-houses is a great step towards cleanliness; better furniture, however, is required. Hat-racks are conspicuous by their absence, and the time boards showing departures of trains require attention and do not show the time clearly.

As regards the latrines for native passengers, the description given in a previous report still holds good in most places, Tanjore being an exception. It is of course difficult to induce the native with his primitive ideas of sanitation to use the enclosures as he should, and in all probability the reason why so many prefer to remain outside is the knowledge that others before him have not been scrupulous in this respect. Still improved latrines might in time educate him. Another reason for his not entering is the fear that the train may go off and leave him behind, and on the night of the 18th I saw three passengers alight and proceed in the direction of the latrine, when the guard blew his whistle and they hastened to their places instead. I am aware of the objection raised to the provision of accommodation in the train itself, but on the fast mail trains at least this might be provided as a tentative measure, and I doubt if much inconvenience to permanent-way gangs will ensue. At the same time improved latrines are required at stations also. And while a great deal may be said in favour of the liberal provision of tar in native latrines, the principle has been wrongly carried into the European accommodation also, and new lavatories should be built in all the important stations on modern principles. I recommend the "granolithic" or some similar continuous pavement, and glazed tiled walls. There is a large and increasing tourist traffic on the South Indian Railway, and the ideas of passengers must at present receive a rude shock. The replacement of all latrines might quite fairly be a charge against Revenue.

Another question with respect to sanitation arises from the want of proper provision for railway employes and coolies working in the larger station yards and goods-sheds. I believe that recently an action was brought against a railway company in England on the ground of neglect in this respect, and that the action was successful. At many of the larger stations provision is wanting, and the result I saw myself at Tuticorin; while looking into a question which will be noticed later, I saw more than one cooly near the goods-shed committing a nuisance in the railway compound. At Negapatam, also, complaint was made on this score and something should be done to remedy it. I understand that the Municipality here are in some degree responsible. I commend to the notice of the Agent the new process of disposal of sewage by means of bacteria, and which might well be introduced at the Negapatam works as an experiment. Colonel Ducat's "Absaf" filter would appear the simplest and cheapest type. A small installation would cost from Rs. 400 upwards, and eventually these might be introduced at the larger junctions.

13. STATION MACHINERY.—I inspected the points and crossings at Cuddalore Old Town, Villupuram and Tuticorin and regret to have to report that in many instances I found them out in gauge, lead, clearance, and other respects. At Villupuram I found many sleepers not adzed so that no cant is given to the rail. In former years, for some reason unknown, a gauge slack by $\frac{1}{2}$ " in front of the points was ordered, and when recently tying the stock rails together in front of the switches this slack was left in; but it must be remembered that unless the gauge is exact in front of the tongue rails a higher speed than 10 miles per hour is forbidden by Circular No. IX Ry. of 18th August 1893. If the new interlocking signal system is to be designed to admit of a higher speed, all these must be altered, and indeed this should be done at once as the fast mail trains habitually exceed 10 miles an hour over facing points.

In the larger station yards the old 40 lb. rails and points and crossings should be renewed on sidings, as they are not strong enough to stand the wear and tear of constant shunting. The maintenance of station yards requires a lot of attention in this respect.

14. SIGNALS.—The system of lowering and raising all signals three times as the inspection train passes is an excellent one as the working order of each one can be observed. They were on the whole in very good order, but several required painting especially at Villupuram, Sundaraperumalkoil and Pallavaram.

At Villupuram the home signals controlling the north end are badly placed, and sighted.

At Vaithisvarankoil the home signal is obscured by trees.

At Peralam and Tiruvallur, the distant signals on the Karaikal and Mutupet branches, respectively, did not fly up properly; this may be due to imperfect adjustment of weights to counteract friction on the curves.

At Nagore, on the night of the 14th, the home signal showed part green, part red.

At Erode the signal controlling exit from the locomotive yard is weighted to fall instead of to fly to danger.

At Nidamangalam the distant signal has lost its stop and drops too far.

Guduvancheri.—The signal wires were very slack, but were as tight as the counterweights allowed. This matter might be considered.

15. MISCELLANEOUS.—Beach Station.—The condition of the harbour lines was complained of and wagons were reported to have been derailed nine times last year. There is much trespass across the station yard in the afternoon. Here and elsewhere the Railway Police seem to consider trespass beneath their notice, as I saw myself at Arkonam. The door over one of the sewer manholes near the goods-shed was broken and it will be strange if an accident does not result. This is in the charge of the Municipality.

Chingleput.—The light in the bath-rooms is poor and translucent fixed venetian shutters might be provided instead of the present movable wooden ones in the windows. Glass Mangalore tiles are also useful for lighting purposes. The door shutters should be closed. This applies to other stations, for instance, Villupuram. The cook-house floor wants attention.

Arkonam.—The barriers opposite the ticket windows here and elsewhere are too close and of a bad type with a sharp angle against which people might be hurt. It is almost impossible for a passenger laden with bundles to squeeze through. The Egmore type is an excellent one.

Wallajabad.—The watering arrangements here may be moved to Villiambakam where good water can be obtained.

Kolatur, North.—An Annett's lock on the south facing points here is not useful, and might be removed on the substitution of the ordinary padlock.

Villupuram.—The drain from a washing place near the native refreshment-room has no proper outlet, and a stagnant mosquito-breeding puddle near the school is the result. The north ashpit also is badly drained. The borrowpits to the north-west of the yard are used as a latrine and might be filled up from the cinder heaps close by. In the new quarters being built here, I noted that the foundations of partition walls

have been taken down as deep as those of the outer walls. Considering that these partition walls probably take no weight, this must be considered faulty and extravagant.

Cuddalore New Town.—The Scotch block at the lay-bye was not locked and I found this at several stations. The practice appears to be that they are locked only at night, but I see no reason for differentiating between night and day.

Chidambaram.—An old carriage body on the platform is an eyesore and within standard dimensions.

Shiyali.—Trees overhang the line and this is an element of danger, as the branches might fall across the line in a storm.

Mayavaram.—An extra siding has been put in the locomotive yard here, but to get engines into this it is necessary to foul a traffic siding and pass the signal controlling exit. This can be quite easily rearranged and should be done. The whole station requires remodelling, being especially deficient in tranship and goods siding arrangements. The station building also is old and inconvenient. The island platform requires consolidation on the surface, as also does that at Peralam.

Tiruvallur.—At this and several other stations there is an arrangement by which cross-over roads are introduced at the centre of the platform to enable the crossing of trains without "setting back," but one result is the rendering useless for alighting purposes of a considerable length of platform and that opposite the station building. "Scissors" crossings are proposed to reduce this disadvantage, but the waste of platform length still remains, necessitating the lengthening of the platform at the ends. At this station four trains cross at the same time, and every passenger has to alight or enter the train in the open, the passenger shelter being opposite the cross-over roads. What the best plan may be is a matter for considerable discussion, but the present arrangement is the worst from the passengers' point of view. The shelter here seems inadequate considering that the passengers for four trains collect at one time. The latrine should be moved: it has been roofed in because it was looked into from the overbridge, and the want of light or air has caused it to be offensive in the hot weather.

Sikkil.—A latrine might be provided here.

Negapatam.—The ladies' waiting-room is very uncomfortable and the cook-house of refreshment-room dirty. Quarters for the Assistant Physician are required and a site near the Locomotive shops should be obtained if possible. At present, in case of a serious accident, medical aid could not be obtained under at least half an hour. There is much trespass across the yard here and complaints were made of the noise and nuisances committed by trespassers. Here again the Railway Police are indifferent, but the railway servants themselves have power to remove trespassers, who refuse to leave the premises, under section 122 (2) of the Railway Act, so that the remedy is in their own hands.

Nidamangalam.—A train standing at the platform here blocks the level crossing gate. This is one of many stations requiring remodelling.

Tanjore.—Some single and double "slips" in this yard are worked by separate levers at each points. This is likely to be a fruitful source of derailments and the points should be connected up by rodding and worked by one lever. The pit in the engine-shed which has an average depth of 3' 6" is reported by the District Locomotive Superintendent to be too deep, and the bottom may be raised 6" to conform to standard dimensions—see Chapter III, paragraph (15).

Trichinopoly.—The dead end beyond the engine turn-table should be kept clear of axles and the like.

Pulliarpatti ballast siding.—There has been great delay on the part of Revenue authorities in handing over some land required here. The application was made in June 1901 and five reminders have not yet had the effect desired.

Puliyur.—Two deputations met the train here—one to request the moving of the station a mile or so westward, the other to urge its retention in its present position. A permanent station has been sanctioned and work well advanced, so that the request

of the first deputation could not be granted; but I am of opinion that, from a traffic point of view, the other site proposed is the better one, though more expensive for construction. Great delay has taken place in the handing over of land by the Revenue authorities here.

The inhabitants of this district are very importunate in their requests for more trial stations, but it has been found that no increase of traffic follows. The multiplication of stations leads to considerable delay in through running, and such stations can really only be served by local trains, which hardly meet the desires of the petitioners. Enough probably has been done in this direction.

Erode.—The loop line over the engine turn-table in the locomotive yard is crowded with spare coaching stock and its usefulness impaired. Spare sidings for the stock might well be put in. The turn-table requires attention.

The question of the overbridge was mentioned in the last report. I find now that the Madras Railway is converting the only exit from their platform for third-class passengers into an entrance from a new waiting shed, and that the only apparent means of exit will be by ascending on to the overbridge and descending by a flight of steps over the palisade fence. A regular block therefore is bound to take place on the bridge when the stream from the South Indian Railway train meets the stream desiring to get out of the station to the town, and a new exit should be opened in the platform fence. The overbridge itself is much too narrow.

Dindigul.—New notices on the boards are required.

Madura.—The refreshment-room cook-house stands in need of improvement, and the running-room cook-house wants a proper chimney. The running-rooms themselves are dark and dismal and the quarters here require improvement. A proper Institute would be a boon. The new overbridge between platforms is rather narrow.

An estimate for alterations to the station building has gone to the Government of India for sanction, but at a slightly greater cost much greater improvements can be made, and new proposals might be submitted.

Tuticorin.—The three throw points at the entrance to the locomotive yard require attention. The mail train rake stands on a siding in the Locomotive yard and which leads into the main line with facing points. This siding might be trapped.

My attention was drawn to a lane running past the back of the Locomotive foreman's quarters and outside station limits. This is a stagnant swamp and in a filthy and insanitary condition used, as it is, as a latrine. A child of the foreman is suffering from typhoid fever, not improbably in consequence of this, and the Municipality might be asked to attend to this nuisance and make a proper road of it. At the same time the railway company should make a drain through their premises to carry off the water.

Ammayandayakkanur.—One of the glass name slips in the lamps was upside down.

16. FACTORIES.—I inspected those at Madras (Egmore), Cuddalore Old Town, Negapatam, Trichinopoly and Madura. I do not consider that the engine shed at Egmore comes within the purview of the Factory Act as no "steam, water, or other mechanical power" is used, the machinery being turned by hand. Moreover the number of over 100 is made up by counting all drivers, firemen, etc., at work on the engine run, and for these reasons I recommend that it be released from the operation of the Act.

17. STORES.—The general stores at Negapatam were inspected and no more than a reasonable accumulation of new stores was found here or at any of the minor depots on this railway. But a considerable quantity of old and second-hand stores at the Trichinopoly engineering shops might be sold, and the state of these shops was not very neat.

18. BOUNDARIES.—The land is properly demarcated outside of the large towns in which in some cases it would appear that much land has been lost through encroachment. The land being valuable this may cause a considerable loss to the company when extensions of station yards become necessary.

Tanjore District Board Railway.

MAYAVARAM TO MUTUPET—54 MILES.

METRE GAUGE.

19. FORMATION.—The banks in several places south of Tiruvallur have settled considerably and the line has been lifted on ballast leaving a rather narrow berm. Unfortunately the whole of the B class land has been surrendered; consequently the lifting has to be done with ballast, and the only way of making up the bank to proper section is to lead the soil some distance by ballast train from waste or high land—such work is rather expensive. This point should not be lost sight of on the Arantangi extension.

20. BRIDGES are now kept in good order.

21. PERMANENT-WAY.—The 40 lb. rails appear to be wearing very well, but the sleepers require renewal in several places; about 2 per cent. have been renewed during the last half-year, but I found several in the road which should come out. The running is very fair.

22. STATIONS—*Tirutturaiappandi.*—This station should be enlarged with provision for second-class passengers and more goods accommodation. The platform walls here and elsewhere require resetting, the stone blocks having settled unevenly.

Peralam.—Some cross-drains through the ballast here are made with old sleepers. These might well be improved.

Villupuram-Dharmavaram and Pakala-Gudur Sections.

METRE GAUGE.

23. This inspection was made on the 29th, 30th and 31st January; the Agent, Heads of departments and District officers were present.

FORMATION is in very good condition.

24. PERMANENT-WAY.—The running over the steel road was much better than on the rest of the line, but appears to have been allowed to go down since the last inspection, and my suggestions for the improvement of the other sections must be taken to apply here also. The joints are down in places between Villupuram and Tiruvannamalai. The running over the road laid with cast iron so called "Denham and Olphert's" sleepers is not good, but I can quite believe that the maintenance of this portion is not easy as the sleepers are of indifferent design and the ballast is much too big.

The "top" on the bridges between Villupuram and Kaniyambadi, Chittoor and Puttalapattu, Pakala and Vayalpad, Serpedu and Kalahasti, requires attention. A drop on the abutment, accompanied sometimes by bad lining, often causes oscillation just where it is least desirable.

25. BRIDGES.—These were generally well maintained.

Turinjee bridge at mile G: $\frac{131}{11}$ girders require pointing as do those of the *Pallar* bridge. The longitudinal timbers on the long bridges have been cut in accordance with the remarks made in the last inspection report.

The girders of the bridge over the Madras Railway near Renigunta have not been windbraced and this might be done as the bridge is in an exposed position.

Between Pakala and Panapakam a wagon was recently derailed and dragged over a bridge with longitudinal timbers without further accident. The Jones' buffer coupling evidently holds up the derailed wagon and prevents the wheels from diverging far from the track. Still as the train in this case must have been closely buffed on a falling grade, a serious accident can only have been averted by luck.

26. SIGNALS.—I noticed that the adjustment of home signals on this length is faulty, and that they are generally inclined upwards. At Katpadi on the contrary they were drooping, as is also the north distant signal at Chittoor.

27. STATIONS.—*Mogaralapalle*.—This is a trial station, which was opened in April 1900, but has turned out rather unsatisfactorily. The present receipts are barely sufficient to pay for the staff, which has been cut down to a minimum, and to provide interest on capital. It is no doubt a pity to close a station, but on the whole I recommend that this should be done. The villagers are apparently quite indifferent, as no deputation appeared to support a petition recently submitted, and the District Board are not inclined to make a feeder road to the station.

Vellore.—The bath-rooms of the waiting-rooms here are dark and dismal.

Pakala.—There is a 350' curve in a crossover road joining the Dharmavaram branch line to the Gudur line at the east end of the platform. I am unable to find that sanction has been accorded to this infringement of the standard minimum radius of 476'. The curve is badly lined and there is a lot of grinding of wheels, when long bogie carriages run over it.

The village here is increasing considerably, and the only means of access to the platform is across the station yard. The provision of an overbridge will be necessary before very long.

The engine-shed pits were dirty and badly drained, and also too deep. They might be refloored and brought into accordance with the standard dimension of an average depth of 3 feet.

The refreshment-room is small, and there is a proposal to convert it into a waiting-room for gentlemen and to build a new refreshment-room.

Gudur.—Waiting rooms are small and uncomfortable for a junction station. The running rooms for drivers and guards were originally designed for menials, and are small and unsuited for their present purpose. New cook-houses also are necessary. Uncomfortable running rooms cannot conduce to the proper rest of employés, and must affect their work.

28. At mile B $\frac{315}{8}$ between Gudur and Vended a trial station awaited passing for opening, but the back fence was within 18 feet of the edge of the platform and I demurred to passing it without higher sanction. These cases of trial stations with narrow platforms undoubtedly require special orders, because the back slope of the platform is $1\frac{1}{2}$ to 1 and passengers might fall down it. At the same time a fence is necessary to prevent passengers from evading the collection of tickets. The back slope might be made easy and the fence put at the bottom of the bank.

29. FACTORIES.—The factory at Pakala has no machinery worked by steam power, and the case is on all fours with that of Egmore. I recommend that this engine-shed also be released from the operation of the Factory Act.

Remarks by the Senior Government Inspector.

The Agent's attention is invited to the various matters mentioned in the report. The following would appear to require very early action:—

Paragraph 1 (c).—The defective condition of the road on certain bridges has been noticed on previous occasions.

Paragraph 1, last two paragraphs.—The employment of special gangs seems to be desirable in certain places.

Paragraph 13.—It is important that the rails in front of the switches should be brought to true gauge. The work might be systematically undertaken throughout the line.

Paragraph 15, Beach Station.—The Municipality should be informed about the broken trap-door.

Paragraph 15, Arkonam.—The barriers opposite the ticket windows should be changed. See paragraph 38 of report embodied in G.O., No. 785 Ry., dated 15th September 1896.

Paragraph 15, Tanjore.—The points at the two ends of each slip should certainly be worked in connection by a single lever.

Paragraph 17.—It would seem desirable to have a clearance of old stores.

Paragraph 27.—The station at Mogaralapalle may be closed.

Paragraphs 16 and 29.—The proposal to release the engine-sheds at Madras (Egmore) and Pakala from the operation of the Factory Act is recommended.

14th February 1902.

(Signed) E. I. SHADBOLT,
Offg. Senior Government Inspector of Rys.

Order—No. 477 Ry., dated 15th March 1902.

Communicated to the Agent, South Indian Railway, for information and guidance.

2. Orders sanctioning the closing of the Mogaralapalle station will issue separately.

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

[Here enter No. 478 Ry., dated 15th March 1902.]

(True Extract.)

(Signed) E. I. SHADBOLT,
Offg. Secretary.

To the Agent, South Indian Railway.

- " Revenue Department, with reference to the remarks against *Pulliarpatti ballast siding and Puliur* in para. 15, and *Boundaries* in para. 18.
- " Local and Municipal Department, with reference to the remarks made regarding the sanitation in Negapatam and Tuticorin stations in paras. 12 and 15.
- " Judicial Department, with reference to the remarks against "Beach Station" and "Negapatam" in para. 15 and factories in paras. 16 and 29.
- " Consulting Engineer for Railways.
- " President, District Board, Tanjore.

27. STATIONS.—*Mogaralapalle*.—This is a trial station, which was opened in April 1900, but has turned out rather unsatisfactorily. The present receipts are barely sufficient to pay for the staff, which has been cut down to a minimum, and to provide interest on capital. It is no doubt a pity to close a station, but on the whole I recommend that this should be done. The villagers are apparently quite indifferent, as no deputation appeared to support a petition recently submitted, and the District Board are not inclined to make a feeder road to the station.

Vellore.—The bath-rooms of the waiting-rooms here are dark and dismal.

Pakala.—There is a 350' curve in a crossover road joining the Dharmavaram branch line to the Gudur line at the east end of the platform. I am unable to find that sanction has been accorded to this infringement of the standard minimum radius of 476'. The curve is badly lined and there is a lot of grinding of wheels, when long bogie carriages run over it.

The village here is increasing considerably, and the only means of access to the platform is across the station yard. The provision of an overbridge will be necessary before very long.

The engine-shed pits were dirty and badly drained, and also too deep. They might be refloored and brought into accordance with the standard dimension of an average depth of 3 feet.

The refreshment-room is small, and there is a proposal to convert it into a waiting-room for gentlemen and to build a new refreshment-room.

Gudur.—Waiting rooms are small and uncomfortable for a junction station. The running rooms for drivers and guards were originally designed for menials, and are small and unsuited for their present purpose. New cook-houses also are necessary. Uncomfortable running rooms cannot conduce to the proper rest of employes, and must affect their work.

28. At mile B $\frac{315}{8}$ between Gudur and Vendod a trial station awaited passing for opening, but the back fence was within 18 feet of the edge of the platform and I demurred to passing it without higher sanction. These cases of trial stations with narrow platforms undoubtedly require special orders, because the back slope of the platform is $1\frac{1}{2}$ to 1 and passengers might fall down it. At the same time a fence is necessary to prevent passengers from evading the collection of tickets. The back slope might be made easy and the fence put at the bottom of the bank.

29. FACTORIES.—The factory at Pakala has no machinery worked by steam power, and the case is on all fours with that of Egmore. I recommend that this engine-shed also be released from the operation of the Factory Act.

Remarks by the Senior Government Inspector.

The Agent's attention is invited to the various matters mentioned in the report. The following would appear to require very early action:—

Paragraph 1 (c).—The defective condition of the road on certain bridges has been noticed on previous occasions.

Paragraph 1, last two paragraphs.—The employment of special gangs seems to be desirable in certain places.

Paragraph 13.—It is important that the rails in front of the switches should be brought to true gauge. The work might be systematically undertaken throughout the line.

Paragraph 15, Beach Station.—The Municipality should be informed about the broken trap-door.

Paragraph 15, Arkonam.—The barriers opposite the ticket windows should be changed. See paragraph 38 of report embodied in G.O., No. 785 Ry., dated 15th September 1896.

Paragraph 15, Tanjore.—The points at the two ends of each slip should certainly be worked in connection by a single lever.

Paragraph 17.—It would seem desirable to have a clearance of old stores.

Paragraph 27.—The station at Moga.alapalle may be closed.

Paragraphs 16 and 29.—The proposal to release the engine-sheds at Madras (Egmore) and Pakala from the operation of the Factory Act is recommended.

14th February 1902.

(Signed) E. I. SHADBOLT,
Offg. Senior Government Inspector of Rys.

Order—No. 477 Ry., dated 15th March 1902.

Communicated to the Agent, South Indian Railway, for information and guidance.

2. Orders sanctioning the closing of the Mogaralapalle station will issue separately.

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

[Here enter No. 478 Ry., dated 15th March 1902.]

(True Extract.)

(Signed) E. I. SHADBOLT,
Offg. Secretary.

To the Agent, South Indian Railway.

- „ Revenue Department, with reference to the remarks against *Pulliarpatti ballast siling* and *Puliyur* in para. 15, and *Boundaries* in para. 18.
- „ Local and Municipal Department, with reference to the remarks made regarding the sanitation in Negapatam and Tuticorin stations in paras. 12 and 15.
- „ Judicial Department, with reference to the remarks against “Beach Station” and “Negapatam” in para. 15 and factories in paras. 16 and 29.
- „ Consulting Engineer for Railways.
- „ President, District Board, Tanjore.

[Appendix.

APPENDIX.
SOUTH INDIAN RAILWAY.

STATEMENT showing minor or other works opened or closed during the half-year ending 31st December 1901.

Reference from or to Government Inspector.	Position of work.	Nature of work.	Purpose for which required.	Whether inspected or not prior to opening.	Whether inspected since opening.	Condition under which authority was given and also Standing Orders acted on.	Actual date of opening or closing.
1. Consulting Engineer for Railways' C. No. 4050, dated 20th July 1901.	At mile 214	Diversion for the erection of a 3-ft. span culvert.	Traffic	Inspected	No	..	Opened on 8th July 1901.
2. Consulting Engineer for Railways' No. 251/O., dated 25th July 1901.	North of Pennair bridge between Villupuram and Strandanur.	Diversion of the main line for the construction of a causeway.	Do.	No	..	..	Authorized on safety certificate.
3. Consulting Engineer for Railways' No. 2883, dated 20th July 1901.	Between Trichinopoly Fort and Elumunur stations.	Flag station at Murugupettai.	Do.	No	..	..	Authorized to be opened on or about 15th August 1901 on safety certificate (opened on 20th August 1901, C. No. 4665 of 24-8-01).
4. Consulting Engineer for Railways' No. 3308, dated 30th August 1901, and Agent, South Indian Railway's No. 1017, dated 6th September 1901.	Between Trichinopoly Fort and junction stations.	Flag station at Durkes bridge.	Do.	No	..	..	Authorized to be opened on or about 15th August 1901 on safety certificate (opened on 20th August 1901, C. No. 4665 of 24-8-01).
5. Consulting Engineer for Railways' telegram, dated 2nd October 1901.	Between Lalapet and Katalai stations.	Flag station at Mahadunapuram.	Do.	No	..	..	Authorized to be opened on or about the 5th September 1901 (C. No. 4369 of 7-9-01).
6. Agent, South Indian Railway's No. 1146, dated 8th October 1901.	North of Pennair bridge.	Diversion for the construction of a causeway.	Do.	No	..	..	Authorized on Chief Engineer's safety certificate (opened on 7th October 1901).
7. Consulting Engineer for Railways' telegram, dated 13th September 1901.	North of Dindigul station.	Diversion	Do.	No	..	..	Closed on the 5th October 1901.
							Authorized to be opened.

REGISTER of infringements of standard dimensions on Railways under the control of the Senior Government Inspector of Railways, Madras.

Serial number.	Localities.		Name of structure which infringes.	Prescribed standard dimensions.		Existing actual dimensions.	Amount of infringement.	Reason for infringement and remarks.	Authority by which sanctioned.
	District or section.	Mileage.		A.	B.				
1	Madras to Tanjore	174 10	Police station on the platform of Mayavaram station.	18	24	11' 10"	FEET. 6	The platform being only 38' 8" a 12' 8" building could not be arranged without infringement.	Sanctioned by Government of India, No 1234 R.C., dated 4th October 1901.

ORDER—No. 561, Revenue, dated 30th June 1902.

Miscellaneous.

The Collectors of Tanjore and Coimbatore should be called upon to explain the delay noticed in paragraph 15 of the inspection report in handing over the land required for the railway in Pulliarpatti and Puliur.

2. All Collectors should be instructed to take immediate steps to recover possession of railway lands encroached upon when such cases are brought to their notice by the railway authorities.

(True Extract.)

(Signed) M. HAMMICK,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue).
„ the Public Works Department (Railway Branch).

Exd. J. S. Pereira.

40 Copies.