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# MADRAS RECORD OFFICE.

Government of Madras.

*Public Works*

DEPARTMENT.

*23/11/57*

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| G.O. No. <u>2734</u> | Press<br>Mis. |
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| Dated <u>23-11-</u>  | <u>18</u> 85  |

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Public Works Department,  
for the month of November 1859.*

No. 54. Read the following letter from Lieutenant-Colonel J. II. BELL, Chief Engineer; to J. D. BOURDILLON, Esq., Secretary to Government, dated 10th November 1859, No. 7099.

No. 2100, dated 1st September 1859.  
Enclosures, 1 letter from District Engineer, Chingleput, No. 1081, dated 18th Oct. 1859 with 2 enclosures.  
1 Letter from District Engineer, North Arcot, No. 996, dated 22nd October 1859, with one enclosure.  
1 Letter from do No. 1029, dated 1st November 1859.

With reference to the orders marginally quoted, I have the honor to forward herewith for submission to Government, original letters from the District Engineers of Chingleput and North Arcot, reporting upon the present condition of the trunk road No. 1 in their respective districts.

2. It will be observed from Lieutenant Tulloch's detailed report, forming one of the enclosures of Captain Moberly's letter, that the 1st section of the trunk road, from the 4th mile from Madras to Púnamálli, (a distance of 10 miles), is maintained at a breadth of 7 yards, 3 of which towards the centre, being constructed with laterite and gravel, is intended for light conveyances, and the remaining two on either side for the use of carts. The 5th, 6th, 10th, 11th and 13th miles stand mostly in need of repairs on this section of the road, which is represented to be in a continuous course of repair throughout the year, owing to the damages caused by the bandies leaving the side tracks and encroaching on the centre of the road, which, from its construction, is reserved for spring and other light carriages. The effects of this are that deep ruts and holes are produced, and no sooner these are repaired than others appear in their turn, and so on, continually requiring repairs to be effected on this account. Every effort tried to insist on the carts taking their proper tracks is said to have proved ineffectual, and the consequence is that the road is subjected to a far heavier traffic than the nature of its construction would admit of. Great difficulty is also said to be experienced in the way of procuring and conveying the materials required for the repair of this section; stone has to be brought from the average distance of  $6\frac{1}{2}$  miles, gravel from  $5\frac{1}{2}$  and laterite from  $6\frac{3}{4}$  miles, respectively.

3. The second section of the road, viz. from Púnamálli to Strípermatúr (14 miles), is stated to be maintained at a breadth of 6 yards, with laterite and gravel, which are obtained from the sides of the road at distances of  $1\frac{1}{2}$  and 2 miles respectively. Although the use of these materials reduces the cost and facilitates the early restoration of the road, their inferiority to stone, which is difficult to procure, is quite evident by the frequent necessity there exists for repairing this portion, which is mostly needed at the 15th, 16th, 19th and 25th miles.

4. The portion of the road from Strípermatúr to the Rájah's choultrí (13 miles), constitutes the third section, and is also maintained at a breadth of 6 yards. The road here is formed partly of stone and partly of gravel and laterite, which are easily procurable, and in abundance, at distances of  $1\frac{1}{2}$ , 2 and  $2\frac{1}{2}$  miles, respectively; and owing to these facilities this section is stated to be in the best condition. Repairs are said to be required at the 32nd, 37th, 38th and 40th miles in this section.

5. From Rájah's choultrí to the limits of the district, ( $13\frac{1}{2}$  miles), the 4th and last section, the road is mostly maintained at a breadth of 6 yards though in some parts where the cost of the material is great it is said to be reduced to 5 yards. On account of the great difficulty of procuring proper metalling at this portion, the use of sand stone and a kind of gneiss is obliged to be had recourse to in the repair of the road, which are reported to be very inferior materials, as the least friction grinds them down to dust in less than three months. It is here remarked that Captain Best, the late Superintendent of roads, after having examined the surrounding country in search of good metal, was obliged to order the use of the above. The average distance of the stone quarries is reported to be 5 miles, and that of the gravel  $3\frac{1}{2}$  miles. The want of laterite, which is not to be had here, is seriously felt when the stone used is of an inferior quality. The 11st, 42nd, 46th, 47th, 48th, 51st, 52nd and 53rd miles, more than half this section, are reported to be in need of repairs.

6. On the whole, taking into consideration the difficulties to be encountered in procuring materials, and the heavy traffic still passing between Madras and Púnamálli, the trunk road in the Chingleput district appears to be in such condition as to permit of the traffic thereon

*Proceedings of the Madras Government, Public Works Department,  
for the month of November 1859.*

moving with ease and at the ordinary rate of speed, and although there are portions where people travelling in light and spring conveyances suffer discomfort, still there is no actual obstruction to their passage.

7. From the report submitted by Captain Prendergast, the trunk road No. 1 in the North Arcot district also appears to be in a fair order for heavy traffic. Half of the width of portions of the road here and there require metalling, besides other occasional repairs which are needed from time to time, and these it is stated are gradually put in order as the maintenance allowance permits.

8. In submitting his report, Captain Moberly urges that as there is still a quick traffic passing between Madras and Pūnamāllī which he does not think will ever be affected by the Railway, the present width of the metalling between these stations, viz. 7 yards, should be maintained, but that a reduction may be made for the remaining portion of the road by allowing a metalling of only 5 yards, and the smallest sum that will be required for maintaining the road at these respective widths is said to be Rupees 37,200. Having observed from Captain Moberly's report, that the great disadvantages under which the trunk road in the Chingleput district labours are not felt in the North Arcot district, Captain

24th October 1859, No. 6433.

Prendergast was requested to state whether he could not make a further reduction in the allowance for his district to increase the amount for Chingleput, if not permanently, at least for the current official year. To this the District Engineer of North Arcot replied, that he can spare a further sum of 3,000 Rupees, but only for the present year, as he is doubtful if it could be done longer, after which period he promises to furnish a report on the condition of the road.

9. Agreeing with Captain Moberly that the road between Madras and Pūnamāllī is of greater importance than that to the west of the latter station, I beg at the same time to observe that, as a fine road has now been opened between Pūnamāllī and the Mount, people would prefer this route to Madras in many respects, and that, therefore, the metalling on the portion of the road now in question may be conveniently reduced to 6 yards.

10. I request the sanction of Government to the arrangements above proposed of reducing the width of metalling between Madras and Pūnamāllī and of increasing the amount sanctioned for the Chingleput district in the orders under reference, to the extent of 3,000 Rupees by a corresponding reduction in that granted for North Arcot for the current year at the expiration of which, further reports will be called for, and submitted to Government on the actual condition and requirements of the trunk road in these districts.

Rupees 25,000.

Rupees 21,500.

11. With regard to the statement in Lieutenant Tulloch's report, (paragraph 19), as to the small amount remaining available for the road in Chingleput, I would observe that the great previous expenditure must render future repairs less necessary, and that it does not seem to me at all expedient to keep this line up to the standard of former years, when the Railway was not opened.

12. Lieutenant Tulloch's view of the prospects of the road under the reduced mileage for repairs is unfavorable, but Captain Moberly who has had long experience in the management of the road does not appear to share in Lieutenant Tulloch's apprehensions.

No. 55.

ORDER THEREON, 23rd November 1859, No. 2731.

The Governor in Council sanctions the arrangement recommended in paragraphs 8 and 10 for augmenting the sum available in the current year for trunk road No. 1 in Chingleput district, as well as the reduction in the width of metalling between Madras and Pūnamāllī from seven to six yards.

(Signed) J. D. BOURDILLON,  
Secretary to Government.

N<sup>o</sup> 7099

Central Office P.W.  
Fort Saint George 2/11  
10<sup>th</sup> November 1859.

From

The Chief Engineer

To

The Secretary to Government  
P.W.

Public

Sir

With reference to the

N<sup>o</sup> 2100 of 1<sup>st</sup> Sept 1859 orders marginally quoted, I have the honor to forward herewith for submission to Government original letters from the District Engineers of Chingleput and North Arcot respecting upon the present condition of the Trunk Road No. 1 in their respective Districts.

Enclo- 1 Letter from Dis<sup>l</sup> Eng<sup>r</sup> Chingleput  
N<sup>o</sup> 1081 of 18<sup>th</sup> October 1859 with 2 Encls:  
1 Letter from Dis<sup>l</sup> Eng<sup>r</sup> North Arcot  
N<sup>o</sup> 996 of 22<sup>nd</sup> Oct/59 with one Encl:  
1 Letter from Dis<sup>l</sup> Eng<sup>r</sup> North Arcot  
of 1<sup>st</sup> November 1859.

2. It will be observed from Lieutenant Tulloch's detailed report, forming one of the enclosures of Captain Moberly's letter, that the 1<sup>st</sup> Section of the Trunk Road, from the 4<sup>th</sup> mile from Madras to Pūnamāllī (a distance of 10 miles) is maintained at a breadth of 7 yards, 3 of which towards

towards the centre, being constructed with laterite and gravel, is intended for light conveyances, and the remaining two on either side for the use of Carts. The 5<sup>th</sup>, 6<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 13<sup>th</sup> miles stand mostly in need of repairs on this section of the road, which is represented to be in a continuous course of repair throughout the year, owing to the damages caused by the Bandits leaving the side tracks and encroaching on the centre of the road, which, from its construction, is reserved for spring and other light carriages. The effects of this are that deep ruts and holes are produced, and no sooner these are repaired than others appear in their turn, and so on, continually requiring repairs to be effected on this account. Every effort tried to insist on the Carts taking their proper tracks is said to have proved ineffectual, and the consequence is that the road is subjected to a  
far

far heavier traffic than the <sup>3</sup>nature of its construction would admit of. Great difficulty is also said to be experienced in the way of procuring and conveying the materials required for the repair of this section - Stone has to be brought from the average distance of 6<sup>7</sup>/<sub>10</sub>, gravel from 5<sup>5</sup>/<sub>8</sub> and laterite from 6<sup>3</sup>/<sub>10</sub> miles respectively. The second section of the road, vizt from Tūnamalli to Strismatur (14 miles) is stated to be maintained at a breadth of 6 yards, with laterite and gravel, which are obtained from the sides of the road at distances of 1<sup>1</sup>/<sub>2</sub> and 2 miles respectively. Although the use of these materials reduces the cost and facilitates the early restoration of the road, their inferiority to stone, which is difficult to procure, is quite evident by the frequent necessity there exists for repairing this portion which is mostly needed at the 15<sup>th</sup>, 16<sup>th</sup>, 19<sup>th</sup> and 25<sup>th</sup> miles.

The

4 The portion of the road from Stripmatir to the Rajah's choultri (13 miles) constitutes the third section, and is also maintained at a breadth of 6 yards. The road here is formed partly of stone and partly of gravel and laterite, which are easily procurable, and in abundance, at distances of  $1\frac{2}{3}$ , 2 and  $2\frac{6}{7}$  miles respectively; — and owing to these facilities this section is stated to be in the best condition. Repairs are said to be required at the 32<sup>nd</sup>, 37<sup>th</sup>, 38<sup>th</sup> and 40 miles in this section.

5 From Rajah's choultri to the limits of the District, (13½ miles) the 4<sup>th</sup> and last section, the road is mostly maintained at a breadth of 6 yards tho in some parts where the cost of the material is great it is said to be reduced to 5 yards. On account of the great difficulty of procuring proper metalling at this portion, the use of

3 A of sand stone and a kind of gneiss is obliged to be had recourse to in the repair of the road, which are reported to be very inferior materials, as the least friction grinds them down to dust in less than three months. It is here remarked, that Captain Best, the late Superintendent of Roads, after having examined the surrounding country in search of good metal, was obliged to order the use of the above. The average distance of the stone quarries is reported to be 5 miles, and that of the gravel 3½ miles. The want of laterite, which is not to be had here, is seriously felt when the stone used is of an inferior quality. The 41<sup>st</sup>, 42<sup>nd</sup>, 46<sup>th</sup>, 47<sup>th</sup>, 48<sup>th</sup>, 51<sup>st</sup>, 52<sup>nd</sup> and 53<sup>rd</sup> miles, more than half this section, are reported to be in need of repairs.

6 On the whole, taking into consideration the difficulties to be encountered in procuring materials, and the heavy traffic

still

still passing between Madras and  
Pinnamalli, the Trunk road in  
the Chingleput District appears to  
be in such condition as to permit  
of the traffic thereon moving with  
ease and at the ordinary rate of  
speed, and altho' there are portions where  
people travelling in light and spring  
conveyances suffer discomfort, still  
there is no actual obstruction to their  
passage.

From the report sub-  
mitted by Captain Pendergast,  
the Trunk road in the North  
Arcot District also appears to be in  
a fair order for heavy traffic -  
Half of the width of portions of  
the road here and there require  
metallings besides other occasional  
repairs which are needed from time  
to time, and these it is stated  
are gradually put in order as the  
maintenance allowance permits  
In submitting his  
report, Captain Moberly urges that

as there is still a quick traffic  
passing between Madras and  
Pinnamalli which he does not  
think will ever be affected by  
the Railway, the present width  
of the metalling between these  
stations, viz 7 yards, should be  
maintained, but that a reduction  
may be made for the remaining  
portion of the road by allowing  
a metalling of only 5 yards; and  
the smallest sum that will be re-  
quired for maintaining the  
road at these respective widths is  
said to be Rs 37,200. Having  
observed from Captain Moberly's  
report that the great disadvantages  
under which the Trunk Road  
in the Chingleput District la-  
bours are not felt in the North  
Arcot District, Captain Pendergast  
was requested to state whether he  
could not make a further reduction  
in the allowance for his District  
to increase the amount for  
Chingleput, if not permanently  
at

21 October 1859  
No 6193

at least for the Current Official year  
To this the District Engineer of North  
Arcot replied that he can spare a further  
sum of 3000 Rupees, but only for the  
present year, as he is doubtful if it  
could be done longer, after which period  
he promises to furnish a report on  
the condition of the road.

27/12/1857  
No 1029

9 Agreeing with Captain  
Moberly that the road between Madras  
and Pinnamallie of greater importance  
than that to the west of the latter  
station, they at the same time to ob-  
serve that, as a fine road has now  
been opened between Pinnamallie and  
the Mount, people would prefer this  
route to Madras in many respects,  
and that therefore the metalling on  
the portion of the road now in question  
may be conveniently reduced to 6 yards.

10 I request the sanction  
of Government to the arrangements  
above proposed of reducing the  
width of metalling between Madras  
and Pinnamallie and of increasing  
the

(Rs 25000

(Rs 21300

the amount sanctioned for the  
Chingleput District in the orders  
under reference, to the extent of 3000  
Rupees by a corresponding reduction  
in that granted for North Arcot  
for the Current year at the expiration  
of which, further reports will be  
called for and submitted to Govern-  
ment on the actual condition and  
requirements of the Trunk Road  
in these Districts.

11 With regard to the State  
ment in Lieutenant Tulloch's report  
(para 19) as to the small amount  
remaining available for the road in  
Chingleput, I would observe that the  
great previous expenditure must  
render future repairs less necessary  
and that it does not seem to me  
at all expedient to keep this line  
up to the standard of former  
years, when the Railway was  
not opened.

12 Lieutenant Tulloch's view  
of the prospects of the road under the  
reduced

reduced mileage for repairs is un-  
favorable, but Captain. Moberly  
who has had long experience in  
the management of the Road does  
not appear to share in Lieutenant  
Dulloch's apprehensions.

I have the honor to be

Sir.  
Fort George S. (Your most obedt. servt.)  
10 November 1859

J. H. Bell <sup>District</sup> Colonel  
Chief Engineer  
by Chief Engineer

Q. M. 859 Q. 111

№ 2921.

From the Westbury  
11 May 14<sup>th</sup> Nov 1899  
on foot

From  
the Chief Engineer  
to the duty to jobs  
at the  
Dated 10<sup>th</sup> Nov/59.  
(Dated 11/5)

Meis. Dettinger 7099

The original  
 letter from the architect  
 and engineer of the ship  
 and a short report  
 upon the present  
 condition of the  
 ship and the  
 progress of the  
 work.

218 March 18 1883

To certain arrangements  
proposed to meet the  
requirements of the  
Chungking District  
Changsha, 23rd November  
*Wells and Wells*

2754. No 2734.  
the Governor in Council have

— toward the accompanying commiseration  
in James Smith's for accompanying the  
winn awards. He is the current year  
for Stuart Powell in Chicago, & last  
District, as well as in the  
and in the

On the reduction in the weight  
of installing between the head  
and the armature from seven to  
six pounds



23. Nov / 59 } Short & Long

Added to the Chief Surge Division