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MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No.	2144	Press
		Mis.
Dated	27-7	1864.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
27th July 1864.*

No. 471. Read the following letter from Major R. HUNTER, in charge of the Ahtoor Ghât, to Colonel C. A. ORR, R. E., Secretary to Government, Public Works Department, dated Serararoy's, 4th July 1864 :—

SIR,

1. I have the honor to acknowledge the receipt of Government Order No. 1,892, dated 29th June 1864, and in accordance with Order No. 644 attached, proceed to such explanation as I deem necessary in the present unfinished state of the works, which have been retarded more than I could have wished by, properly speaking, severe and tempestuous weather, during which large sums of money given on contract were spent in the low country from sheer inability to work on the part of the labourers.

2. As the original line made for the planters has in nearly, if not quite its entire length been abandoned, and as Government have not taken this expenditure into account, I will begin with the first grant of Rupees 800 which was spent in opening a new trace of $1\frac{1}{2}$ miles from the foot of the Ghât to the Sawmy. It barely sufficed to open this for traffic.

3. Application was now made for Rupees 5,000 to turn the road into a width of 6 feet, several more portions of the Planters' line being of necessity abandoned, the Khud line substituting that of the Corkscrew, and a difficult pass forced through the portion known as the Brown Rock. I do not think I need further remark on this contract than that the District Engineer reported to the effect that the money had been made to go as far as Government could expect, although a small portion was still incomplete. I have furnished the District Engineer with an Account Current of the Rupees 800, and if necessary can send an Account Current of the first 5,000 Rupees contract.

4. It has been stated and recorded that I only followed an old native trace; I will not enlarge on this topic, but simply assert that the middle of the Ghât was absolutely impassable, and had to be forced for several miles.

5. It was now proposed to turn the 6 feet road into 12 feet for another 5,000 Rupees, and as the Khud turned out to be a succession of the shelving rocks, that Colonel Hitchins on the spot told me would cost 5,000 Rupees without any other Ghât work, it was finally determined to ask Government to abandon this line in favour of one by Dale and Boyson's Estate, which Colonel Hitchins writes will be attended with great difficulties.

6. This portion is now under operation, but it still is no bar to travellers from all I can see or hear, at the same time that it is abundantly shaded, and avoids a deep river crossing at the bottom of the line beneath the Khud which eventually would require to be bridged as passenger traffic (which was not thought of in the first instance) increases on the line.

7. I am aware that on the Dale and Boyson line the gradients are severe, but this faulty working during my absence at Madras last year corrects itself, as the road widens foot by foot. As regards revetments I would observe that originally I declined to build except at a remunerative rate, and Colonel Birdwood was furnished with a sketch of the style of road I proposed to make, viz., a slice cut out of the hill side and the debris thrown over the edge. Further I would add that the rate for revetting is 1 Rupee for 2 yards (cubic) so that one mile would cost 1,760 Rupees or 6 miles 10,000 Rupees.

8. Burning in fine weather has been adopted in preference to blasting, I consider the cost of blasting so enormous even if it could be fully carried out in the jungle that I propose only to adopt it on compulsion, and when all other means fail. Had I obtained the necessary assistance recommended by Colonel Ouchterlony I might have been more successful, and I would wish to explain here that a common Maistry is all the artizan skill I have had up to the present time, the workmen at present walking 7 miles daily to and from their work.

9. Rupees 1,950 is the amount stated in the report as a liberal expenditure for the whole of the lines including the Corkscrew and Khud or about eleven (11) miles; I would remark that tools have cost me about 900 Rupees and horse allowance for thirty months, say, 900 Rupees,

2 Rs 5000 to turn the road into

Proceedings of the Madras Government, Public Works Department,
27th July 1864.

nearly equals the amount stated in the report as sufficient to construct the lines as now found. I shall have no objection to furnish an account of this second 5,000 Rupees hereafter should the Government wish to have it. But in order that rates may up here be more fully known, a ditch of one cubit with sloping sides cost Rupees 73-5-4 a mile, and supposing a 12 feet road to be twenty times this size, the Ghât when completed should cost in earth-work 1,466 Rupees a mile.

10. Colonel Hitchins requested me some months since to discontinue all work on the Kurdivoor line, which I have done.

11. I originally proposed to construct the approaches to these hills by the mile or half mile, and to be paid in arrears, but it was, I believe, thought better to open the whole line *anyhow*, and I think I may say that traffic on the line has never been obstructed to any injurious extent, even though adopted by passengers for which the line was not originally intended; but which has from the commencement been carefully had in view by myself, otherwise I should have made a rough and ready line for Coolies and Bullocks, whereas I am doing my best to give as good a line for chairs and tonjons as the money admits of.

12. Even now I can draw away Planters' labour and hurry on work, but it was agreed by Colonel Hitchins and myself that it would be better not to disturb the labour market; and in conclusion I will only add that for months there has been, what may be termed, no labour on these hills, but which I am glad to say is now improving.

No. 472. ORDER THEREON, 27th July 1864, No. 2,144.

1. The explanation submitted by Major Hunter, with reference to G. O. No. 1,892, dated 29th June 1864, is altogether unsatisfactory.

2. The Governor in Council considers it unnecessary to enter into the points at issue between Major Hunter and the Officers deputed to inspect and report upon the Ahtoor Ghât. For sums received at various times and amounting in the aggregate to Rupees 12,550, Major Hunter, through the Honorable J. B. Norton, contracted to make a "road in a thoroughly satisfactory manner," of a width of 12 feet, and a gradient of 1 in 9, from the foot of the Shervaroy Hills to "Taylor's saddle," with a branch to Nagalore. This, it is clear, has not been done, and Major Hunter will now be informed that the Government hold him to his agreement, and he will be called upon to state when the road, such as has been contracted for, will be completed and ready for inspection.

(True Extract.)

(Signed) J. H. M. SHAW STEWART, Major, R. E.,
Deputy Secretary to Government.

To Major Hunter.

To the Superintending Engineer, 5th Division.

Exd. S. T. Augustin.

To Colonel Orr R E
Secretary to Government
Sir. I have the honor to acknowledge the receipt of Government order No 643 dated 29 June 1864, and in accordance with order No 644 attached proceed to such explanation as I deem necessary in the present impoverished state of the works which have been retarded more than I could have wished by properly speaking severe and tempestuous weather during which large sums of money given on contract were spent in the low country from sheer inability to work on the part of the laborers—

as the original line made for the Planters has in nearly if not quite its entire length been abandoned, and as Government have not taken this expenditure into account; I will begin with the first grant of Rs 800 which was spent in opening a new trace of 1 1/2 miles from the foot of the Ghât to the Sawney. It barely sufficed to open this for traffic. application was now made for Rs 5000 to turn the road into

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I have furnished the District
Engineer with an A/c of the Rs
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this line in favor of one by
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This portion is now under
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I am aware that on the Dale
& Boyson line the gradients are
severe but this faulty working
during my absence at Madras
last year correct itself as
the road widens foot by foot.

as regards revetments I would observe that originally I declined to build except at a remunerative ~~price~~ rate and Col. Windsor was furnished with a sketch of the style of Road I proposed to make viz a slice cut out of the hill side and the debris thrown over the edge. Further I would add that the rate for revetting is 1 Rupee for 2 yards (cubic) so that one mile would cost 1760 Rs or 8 miles 10000 Rs.

Burning in fine weather has been adopted in preference to blasting. I consider the cost of blasting so enormous even if it could be fully carried out in the jungle that I propose only to adopt it on compulsion and when all other means fail. Had I obtained the necessary assistance recommended by Col. Auchterlony I might have been more successful and I would wish to explain here that a common Maori in all the Artisan skill I have had up to the present time the workmen at present walking 7 miles daily to and from their work.

1950 is the amount stated in the report as a liberal expenditure for the whole of the lines including the Corkscrew and Khud or about eleven 1/2 miles - I would remark that Tools have cost me about 900 Rs and Horse Allowance for 30 months say 900 Rs nearly equals the amount stated in the report as sufficient to construct the lines as now found. I shall have no objection to furnish an account of this and 5000 Rs hereafter should the Government wish to have it. But in order that water may up here be more fully known a ditch of one cubic with sloping sides costs 110 Rs a mile and supposing a 12 foot road to be 20 times this size the labour when completed should cost in Earthwork 2000 Rs a mile.

Col. Hitchens reported me some months since to discontinue all work on the Kurdivor line which I have done.

I originally proposed to construct the approaches to these Hills by the mile or half mile

and to be paid in arrears but I
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 better not to disturb the Labor
 market and in conclusion I
 will only add that for months
 there has been short may be
 termed no labor on these hills
 but which I am glad to say
 is now improving.

I have the honor to be
 Your Most Obedt Servant
 J. P. Hunter

Wm. H. Abbott, Agent

Sherris
 4 July 1864.

can seem to imply a stand there when - could not as he connected

For an receipt from fort at Union for note in finishing road & ready for
 times and amounting all together L-R inspection

9/7/64

12550 Major Hunter has been { See
 from 13th Boston combined to 90 - 2 Sept.
 make a road in a thorough. From 13th Boston 4 May 1863
 "by satisfactory manner" of 1-5-13-27
 a mile of 1/2 mile and spread.

and of 1 mi of from the force of the Shenon.

2000 to Taylor's saddle with a hand
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with the difficulty that he has
 but with, a what too, & many have con-
 him we have nothing else - it regards
 any deviation from the original line
 has been made within convenience
 He must know to be that fort with
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 it must be called upon to state

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Geo Carl D. [unclear] -
28-7-2.

be remembered that

Q. A. 1864. 201

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Submitted for the
Government.

How Stuart is enclosed.

Dr. Stern: from Chicago

Secretary to Govt

Edmund Dicks

Wm. A. R. C. C.

Ms. A. 9. 2. 146-275 July 1864 -

10th July 1941

May or June this letter is an excellent
-factory production but it seems
to me unnecessary to go into the
points at issue between Lincoln
and the Court on the — the

C. 75 July 1864 Wm. D. L.

C. 75 July 1864 Wm. D. L.

C. 75 July 1864 Wm. D. L.

C. 75 July 1864 Wm. D. L.

had heard from Ute & Hunter
of the impossibility of carrying
a road through it. A liberal
expenditure of gunpowder here
& there ~~was~~ all that is needed.
The "deep river" spoken of is a
tiny stream, about 10 yards
wide, & 6 inches deep. 15
front

Major Hunter says ^{that} to erect
the whole plant would have
cost Rs. 10000, alone; but
it was never hinted by us
that the whole plant should be
erected; only in place, where
for the safety of traffic, & the
protection of the road, such work
is necessary. H. C. Maini

is comparing
Major Hunter then explains
that he prefers burning "rocks"
to blasting it. There can be
no doubt that the former is
much the cheaper operation,
& that with the proper, decomposed
shells of boulders it succeeds;
but with rocks of compact
quartz, which is the substance
chiefly met with, it is
perfectly useless. The
present state of the Island is
a proof that something more
than burning is required.
Major H. complains of the
difficulty of getting skilled
labour, & says that if Sappers

had been placed at his disposal, are commended by Col. Bachilerlong, he would have done better. But I am assured by the Railway Engineers that numbers of trains & Masters are available in the immediate neighbourhood. Capt. Salazar too finds no difficulty in getting work of this kind done. Of course they must be paid a little more than common labourers.

Major Hunter then goes on to say that the price he has paid for tools, added to horse allowance for 30 months, nearly equal the value put upon the work executed. If Rs. 500 has been paid for tools, their value cannot have vanished already. Major Hunter told me that the supply he had received from England had been used indiscriminately upon the great work & upon his cotton estates. Regarding the Horse Allowance claimed for 30 months, it should be borne in mind that Major Hunter undertook to expend the first grant of Rs. 5000 in 3 months & that the second grant of like amount

& letter to J. Ch. Esq. South Circle from J. D. Norton Esq. of there, dated 11 June 1862. para 17.

+ £. 0. 2803
28. Sept. 63.

14
I should have been worked out by the end of October last, or within 5 months from date of sanction. However in calculating the cost of the work done, we took into account neither the price paid for a large supply of tools, nor horse allowance for the High Contractor. — We simply took accurate measurement of the work done, & allowed liberal rates for it.

Major Hunter says that a ditch of one cubit with sloping sides costs for the "Shewaroy" 110 Rs. a mile. By this I suppose he means a ditch, $4\frac{1}{2}$ wide at top, $1\frac{1}{2}$ wide at bottom, & $1\frac{1}{2}$ deep, or with a section of half a square yard. The ditch would therefore cost at the rate of 8 19-3 a day per square. This, except in difficult soil, is an extreme rate, for costly labour can be got easily. I believe at 3 annas a day.

Major H. goes on to say that supposing a 12 foot road to be 20 times this size the grant when completed should cost in

"Cartwork 2000 lbs. & mile."
He here supposes that the
section of his 12 foot road
is everywhere 10 square
yards. I can safely say
that this is nowhere the
case upon the whole plan.
In many places the cutting
for a 12 foot road would be
under 1 1/4 yard. While the
average would certainly
be under 3 1/4 yards.

Major H. says that the
line was not originally
intended for Napier's troops
but this seems to be a grave
misconception on his part.
Throughout all the corres-
pondence which passed
on the subject, the great
object proposed by all the
supporters of the work was to
make a short & easy access
to the hills from Meadras.

Major H. takes credit to
himself for making "as
good a line as the money
admits of" — quite
ignoring the fact that
he bound himself down
to make the road 12 feet
wide with a slope of 1 in 4.

Vide letters from
J. H. Norton Esq.
Major.
Also G. R. Pechterlong
letters & reports.

Throughout his letter,
Major Hunter has quite
omitted to take any notice
of the points chiefly insisted
in our report.

Wm. Hunter

6 July. 64.

[Faint, illegible handwriting in the top left corner]

Pub. Wks. Dep't
 25
 11-12-1887

21

To the Secretary of the
 Public Works Dept
 in New York
 As mentioned in
 your letter of the 14th
 I am replying
 the \$1000 of the
 will you please
 by attaching it
 please answer

~~\$1000~~ ~~2000~~
 1466
 My

Memorandum
 J. H. M. W. W. W.
 18. 2. on the letter from
 Major R. R. R. R.
 the French State of
 the 14th of the 18th

3071

2144 Pub: W. R. DePaul

23

Ja of Servant
W. R. DePaul

Shenandoah
17 July 1864.

The points at issue
between

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of the grounds for
the purpose but in
furtherance of
the interest of the
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in the interest of the
grounds and with
it as a first step
toward the

2144 Pub: W & R Depo 25
Proceedings of the Madras Government.
Under date the 27th July 1864

Recd the following
from Major R Hunter
in oh: of the Ahtoor Shant

Offering his explanation
regarding the present state
of the Ahtoor Shant Salem
District

H. E. 4th July 1864

The explanation
submitted by Major
Hunter with reference to
H. O. N^o 1892, dated
29th June 1864, is altogether
unsatisfactory.
The Government
~~His Excellency~~
Council considers it un-
necessary to enter into
the points at issue
between

[Handwritten signatures]

between Major Hunter
and the Officers deputed
to inspect and report upon
the Ahtoon Isthmus -

For sums received at
various times and amounts

in the aggregate to Rs
12,550, Major Hunter,

thru the Honorable
J. B. Norton, contracted
to make a "road in a
thoroughly satisfactory

manner," of a width of
12 feet, and a gradient

of 1 in 9, from the
foot of the Shewanoy
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This, it is clear, has
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Major Hunter will now
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and he will be called
upon to state when the
road, such as has been
contracted for, will be
completed and ready
for inspection -
|||.

To
1 Major Hunter
5 "Supers" 5th Regt

26
20th July

B.O.V 1864 Dept
Pro. of Govt for July

No 2144

Pro. of the Madras Govt
D/27th July/64

Received
13/7/64
17/7/64
17/7/64
17/7/64

Letter from Major Warburton
furnishing his explanation
as to the present state of the
Shloor Ghait, Salem Dist.
District, with orders thereon.

A/41 472

mu