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# MADRAS RECORD OFFICE

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## Government of Madras

Public Works DEPARTMENT

| G.O. No. 2729 | Press |
|---|---|
| B.P.—No. 132-133 | Mis. |
| Dated 8-11- | 1951 873 |

**Not to be folded or roughly handled**

*Proceedings of the Madras Government, Public Works Department, 8th November 1873.*

No. 132. Read the following letter from Captain J. L. L. MORANT, R.E., District Engineer, Neilgherries, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Ootacamund, 4th October 1873, No. 183 :—

In G. O., No. 1,508, of the 12th May 1868, an estimate, amounting to Rs. 6,450, was passed for the north branch of the water-supply of Ootacamund. In G. Os. No. 2,749, of the 16th November 1870, and No. 195, of the 24th January 1871, a revised estimate, amounting to Rupees 13,470, was sanctioned for the same work. And again in G. O., No. 2,227, of the 19th September 1872, a third estimate, amounting to Rupees 16,260, was approved by Government. At the close of 1872-73 the works according to the last estimate were all satisfactorily completed.

2. In each of the above cases, although the second estimate exceeded the first by more than 100 per cent., and the third estimate exceeded the second by 21 per cent., the explanations furnished were considered satisfactory.

3. I now much regret to be obliged to lay before you a supplemental estimate for this work, amounting to Rupees 2,155, or 12 per cent. in excess of the last sanctioned estimate. I will do my best to explain how this supplemental estimate has become necessary, and I respectfully hope Government will be pleased to admit that the reasons now given are as satisfactory as those which accompanied the two former revised estimates.

4. When the north branch of the water-supply was completed in March last according to the last sanctioned estimate, which had been framed upon experience gained in the completion of the south branch, it was unnexpectedly found that the open duct for which the estimate alone provided would not retain the water which passed through it. It had answered the purpose very well in the south, but the case was very different in the north branch. I then made a yard cut into the solid hill side and formed the channel in that, but it still would not act properly.

The soil materially differed from any met with before, and that part of the station abounded with herds of straying cattle, which constantly crossed and recrossed the duct to its perpetual injury. Every effort was made to stop this evil; the cattle were pounded and notices were put up warning trespassers off, but without success. There was nothing then to be done but to make another yard cut into the hill side, and to turf the whole of the outer bank with grass sods so soon as the cut had been made. This answered the purpose so far.

5. Another unexpected evil was also met with. In all our previous channels we had never cut catch-drains finding them not absolutely necessary. Consequently none were thought of in any of the estimates previously submitted. But much of the soil of the north supply channel is loose and porous, and a good deal of cultivating and ploughing going on above the channel the supply duct became incessantly choked with silt, which interfered with its levels to such an extent as to throw it out of working order, and caused the water to overflow and breach it in many parts. It thus became necessary to provide catch-drains which were led over the pure water duct by means of tarred teakwood troughs, the cost of these latter being met out of the contingencies of the sanctioned estimate.

6. Having with considerable anxiety and labour overcome these obstacles which at one time threatened to render useless all previous labour and expense, I was met with a third difficulty which was never for a moment anticipated. When the water reaches the St. Stephen's Church compound it has to pass under the road just outside the gate through 516 feet of iron piping, and issues close to the Commissioner's Office. Owing to the small diameter of this pipe (8 inches) and its gentle fall (1 in 258) less than one-half of the water which was brought down from the reservoir passed through it, the remainder not only running to waste but injuring the public and private roads alongside the church-yard wall and flooding the church compound itself at that spot. Moreover, the half supply of the available water was insufficient to keep filled the three filtered cisterns in the bazaar, which the Municipality had constructed at a considerable cost, and to perform the other offices which were expected of it. This obstacle became then one that it was clearly very necessary to overcome. It had been quite overlooked in all the other estimates. It was not feasible to take up the iron piping, which being of cast iron would have broken in the endeavour to separate the joints. It would also have cost something like Rupees 1,600 to lay another line of iron piping. There seemed therefore nothing else to be done than to endeavour to obtain a head of water sufficient to force the whole of the water received through the long length of small piping which already existed. A head of 4 feet was therefore obtained by constructing a masonry duct 103 feet long with an escape, etc.

7. Having now explained the necessity of these supplemental works, I beg to be further allowed to respectfully lay before you the reasons for bringing to a satisfactory conclusion the north water-supply branch without previously obtaining sanction for the supplemental estimate. When the last sanctioned estimate was fully worked up to I found the channel would not act. The water would not flow beyond a certain point, being absorbed in the channel, etc. A large sum of money had already been expended on it, but still the work was incomplete (not from any fault of mine), and failed to effect that for which it had been made. This, of course, took me by surprise, as my previous experience in Ootacamund itself (founded as I thought on sufficient data) had led me to expect something quite different. I gave the matter due consideration and came to the conclusion that, as the work was one so much and urgently required by the public of Ootacamund, and had already been in hand five years, and as the subject had already been so often (in the shape of revised estimates) before Government, it was better before troubling them again and perhaps *again* in the matter to try the best available remedy, which gave good promise of success, instead of stopping a work of such immediate necessity until a supplemental estimate could be prepared and passed by Government, the delay of which might increase the difficulties of the position. I was also impelled to this course by my chancing to have at hand an extra subordinate who had been employed on this work for some little time, knew some of its difficulties, etc., and could comparatively in an easy manner satisfactorily complete it, and who was to leave this district as soon as it was finished.

8. For acting somewhat unauthorizedly in the matter these are my reasons, which I beg respectfully to submit for your favourable consideration.

9. The north water-supply scheme, I may add, has been handed over to the Municipality, who have received it without complaint after carefully going over the whole of it more than once. It has been in their hands for some two months and works well.

10. In conclusion, should the above explanations be considered not fully satisfactory, I beg to be allowed respectfully to request that Colonel Farewell, who prepared the first estimate, and through whom, as Superintending Engineer, the other two estimates passed, be directed to go over the whole of the channel. All the supplemental works can be then shown to him, and, if necessary, measured and checked, and their necessity or otherwise be explained.

P. S.—Copies of all the previous estimates are appended for information.

No. 133. ORDER THEREON, 8th November 1873, No. 2,729.

CIVIL WORKS, No. 12.

HIS Excellency the Governor in Council having fully considered the explanations furnished by the District Engineer in this letter is constrained to observe that that officer has acted most reprehensibly in deliberately exceeding sanctioned estimates on his own responsibility in this as in the case of the cooking stoves at the Wellington Barracks. An officer of Captain Morant's standing ought fully to have been aware of the pecuniary responsibility which he incurs by such departure from the standing rules of the department; and while the Government are quite willing to admit the superiority of the work carried out, they are compelled to seriously caution him against a similar transgression of rules.

2. The excess expenditure of Rupees 2,155 is passed, and the District Engineer will report how he proposes to adjust the outlay.

(True Extract.)

Colonel, R.E.,
*Secretary to Government.*

To the District Engineer, Neilgherries.
,, Officiating Controller of Public Works Accounts, with Supplemental Estimate.

Exd. S. T. Austin.

Spare Copies

Estimate No 1 of 1868/69. 5

Neilgherry Range Coimbatore District

Work. Water Supply to the North of the Lake at Ootacamund

| Measurement L. B. & Contents | | Particulars | Rate | Amount of each part | Amount |
|---|---|---|---|---|---|
| 187 48 3/4 28 1/2 26 088 79. | | Earthwork to Bund of Reservoir | | | |
| 38/8 31 11 1709 3/8 | | Do. — Do. | | | |
| 31 1/4 33 13 1469 3/4 | | Do. — Do. | | | |
| 900 3 10 27,000 | | Do. to Escape Channel of Do. | | | |
| 450 30 10 135000 | | Do. Cutting | | | |
| 154671/2 Cft. or | | | | | |
| 1683 2/3 Cyards | | | @ 6 per yard | 1 .. 2806 .. | |
| 2650 Cft. Rough Stone in Chunam for escape Weir | | | | 40 .. 1060 .. | |
| 100 Distributing Sluice | | | | 2 .. 200 .. | |
| 300 Rg. ft. of Covered Rough Stone Channel under road & path | 3 | | | 1 .. 300 .. | |
| 1/2 Miles of Channel on path 3 wide | | | | 120 .. 540 .. | |
| 3000 cy ds. | | Earth re filling | @ 2 cy ds. | 1 .. 250 .. | |
| 1 | Jennings | Patent delivery Sluice and Guard Stone | 3 | 200 .. 200 .. | |
| 1 | | Guard Sluice to pipes with Cistern and Escape Channel | 3 | 100 .. 100 .. | |
| 24 3 3 1 | | Sluice well | | 390 .. 390 .. | |
| | | Carriage of 100 Pipes from Wellington | | 1 .. 100 .. | |
| | | Laying, fitting and packing | | 50 .. 50 .. | |
| | | | | | 5996 10. |
| | | Sundries &c. | | | 3036. |
| | | Puddling and repairs of existing Channel | | | 150 .. |
| | | | Total Estimate Rupees | | 6450 .. |

Ootacamund 6th April 1868.

J. W. Farewell Major.
Executive Engineer

Ootacamund 26th September 1873.

(True Copy) [illegible] Capt R.E.
District Engineer

Supplemental Estimate No 80 of 1870/71 7t

Neilgherry Range. Coimbatore District

Work Water Supply to the Side of Ootacamund

| Measurement No. | Contents | Particulars | Rate | Amount | Total |
|---|---|---|---|---|---|
| 1 | 87 48 2/3 28 1/2 | 2688 5/3 | Earthwork to Bund of Reservoir | | |
| 2 | 50 8 2 | 1 1 | 1709 2/8 | do do | | |
| 3 | 1 1/4 33 | 13 | 1469 3/4 | do do | | |
| 4 | 465 | 30 | 1 0 | 139.500 | do do | | |
| 5 | 900 | 3 | 1 0 | 2700 | do to Escape Channel of Reservoir | | |
| | | | | 459/171 | Cubic feet | | |
| | | | | 17.006 1/3 | Cubic yards Earthwork @ 6 annas per 1 | | 2834 62 |
| | | | | 2650 | Cubic feet Rough Stone in | | |
| | | | | | Chunam for Escape Weir | 40 | 1060 |
| | | | | 300 | Running ft of Covered Rough | | |
| | | | | | Stone Channel under road & path | 1 | 300 |
| | | | | 4 1/2 | Miles of Channel on path 3 feet wide | 120 | 540 |
| | | | | 1 | Guard Sluice to pipes with | | |
| | | | | | Cistern & Escape Channel | 100 | 100 |
| | | | | 1 | Sluice well | 390 | 390 |
| | | | | | Carriage of 100 pipes from | | |
| | | | | | Wellington including laying fitting &c | | 150 |
| | | | | | Puddling & repairs to Existing Channels | | 150 |
| | | | | | Stone Pitching to Bund. vide | | |
| | | | | | Supdg Engr's letter No 11 para 3 of | | |
| | | | | | the 15th April 1868 | | 1300 |
| | | | | | Shelter for Dam Coolies | | 250 |

Estimate No 60. of 1872/73

Neilgherry Range — Neilgherry District

Work: Water Supply to the North side of Ootacamund

| Quantity | Particulars | Rate | amount | Total. |
|---|---|---|---|---|
| 17006⅔ | Cubic yards Earth Work: — @ 6 pd per | 1 " " | 2834 6 2 | |
| 2650. | Cubic feet Rough Stone in Channel for Bed & Sides of Weir. | 40 " " | 1060 " " | |
| 500 | Sq feet of Covered Rough Stone Channel under Roads and Path | 1 " " | 500 " " | |
| 4½ | Miles of Channel on Paths 3 feet wide | 150 " " | 675 " " | |
| 1 | Sluice Well. | " " " | 390 " " | |
| | Stone Pitching to Bund (Vide Supt Engr's letter No 11. Para 3 of the 15 April 1868. | " " " | 1300 " " | |
| | Shelter for Dam Lascars. | " " " | 250 " " | |
| 1 | Iron Valve chest with Rods &c & lifting and lowering Drum including fittings &c | " " " | 500 " " | |
| 1. | Foot Bridge from Bund to tower | " " " | 350 " " | |
| 1 | Guard Sluice to Pipes with Cistern and Escape channel. | " " " | 100 " " | |
| | Carriage of 100 Pipes from Wellington including and laying fitting &c | " " " | 150 " " | |
| | Puddling and Repairs to Existing channel | " " " | 150 " " | |
| 1 | Culvert Bridge | " " " | 600 " " | |
| | | | 8859 6 2 | |
| | Supt & Sundries | | 1000 9 10 | 9860 " " |
| 6080. | cft Cutting Tunnel including Cost of Timber framing &c — @ 2½ cft per | 1 " " | 2432 " " | |
| 1696. | cft Rough Stone in Hydraulic Mortar for Foundations of Tunnel | 45 " " | 763 3 2 | |
| 2622. | cft Brick in do do for Walls of do do | 50 " " | 1311 " " | |
| 1204. | cft do do do for arch of do do | 50 " " | 602 " " | |
| | Carried over. | | 5108 3 2 | 9860 " " |

125462

Supt & Sundries @ 1/2 per Cent 1254/10

Total Estimate Rs 134" "

N. B. Red Inch items are Supplementary not provided in Sanctioned Estimate

Executive Engrs Office
Neilgherry Range
Ootacamund 5th Dec 1870

Sd/ J. L. L. Dremmt Lieut RE
Executive Engineer

(True Copy)

Dremmt Capt RE
District Engineer

District Engrs Office
Neilgherry District
September 1873

| | | | | |
|---|---|---|---|---|
| | Brought forward | | | 5105 3 2 9860 |
| 3223 | Sqft Plastering to Tunnel | 12 | -- | 386 12 2 |
| 1010 | Cft Brick in Mortar for Dunghalls &c do | 50 | -- | 505 - - |
| 780 | Sqft of Plastering do do | 12 | -- | 93 9 7 |
| | | | | 6093 8 11 |
| | Sufft Sundries | 306 7 1 | | 6400 - |

Total Estimate Rupees 16260

Executive Engineers office
Neilgherry Range
Ootacamund 22 august 1872

Signed J. L. Lillingston Capt.
Executive Engrs

(True Copy)

Jas Morants
Capt RE
District Superin

Officer in charge

O.W. 5877/73
4.

L.C. no: 2729
8th Nov/73

13th

Letter from the District Engine
Neilgherries, dated 4th October 1873, No. 185

Submitted for Order
The procedure of the
District Engineer, in
this as in the case of the
Cooking Stoves at the
Wellington Barrack Co
in casting upon him
self the responsibility
of deliberately and greatly
exceeding sanctioned
estimates of his own
preparation is most
reprehensible, and can
only be accounted for
by his being the Junior
officer in charge of

District and only lately
left without the guidance
of a superintending Engineer.
His work however is
thorough and first rate
in quality, and he has
been so seriously ad-
-monished by the Chief
Engineer on the irregu-
-larity of his procedure
and the pecuniary res-
-ponsibility which it
entails upon himself
that it will be suf-
-ficient, it is submitted
if he be cautioned
that further transgression
of the standing orders
of the Department will
lead to his deprivation

of

Wm Sanders the pro-
posed admonition
leaving out the last 2 lines
of the text
15/10 WL

Mr Gibbons has been ac-
cepted WL

of. charge of. the District.

G. W. Mathew Capt. R.E.
Secretary to Government
S.P.D.

Calcutta
15th October 1833

Dustrict and duly attested

is passed and the District Engineer will report how he proposes to adjust the outlay.

GWW

To W. D'Evan Neilgherries
Conl with Supt Botanical Gardens
Ft Depot

S.C. sent 14/11/73

No. 132. 33.

P.W. 1873 Depart.

No. 5877.

From.

The Dist. Engineer
Neilgherries.

Dated 4th Oct 1873.
Rec'd 29th Oct 1873.

No. 183.

Sir,

Regarding the excess outlay on the North Branch of the water-supply of Ootacamund—

No. 2729

His Excellency the Governor in Council having fully considered the explanation furnished by the District Engineer in this letter is constrained to observe that that Officer has acted most reprehensibly in deliberately exceeding sanctioned estimates on his own responsibility in this as in the case of the Cooking stores at the Wellington Barracks. An Officer of Captain Morant's standing ought fully to have been aware of the pecuniary responsibility which he incurs by such departure from the standing rules of the Department. And while the Govt are quite willing to admit the superiority of the work Carried out, they are compelled to seriously caution him against a similar transgression of the rules.

The excess Expenditure of Rs 2155

1/2507

Contt. of 1873 Squadrons.

PUBLIC WORKS.

2nd

To The District Engineer
Nilgherries

Dated

Recd. Dec. 3

G. O. 8 Nov. 1873. 2729

Nos. 132 & 133

North branch of the Cauvery water supply

Water supply &
Encroachments.

Papers relative to the
Encroachments on the
Cherries, & submitting
Explanations with reference
to the Superintendent on the