MRO 1—77,005—8-6-37.

(1) Number of pages 12

(2) Date of repair

(3) Initials of the Reference

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 1349 Press ~~Mis.~~

114-15

Dated 4 · 5 · 1867.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
4th May 1867.

No. 114. Read the following letter from the Superintending Engineer, 5th Division, to the Secretary to Government, Department Public Works, dated Cuddalore, 25th April 1867, No. 21 :—

1 Estimate.

1. With reference to G. O. No. 3,720, of the 22nd November last, I have the honor to submit, for the sanction of Government, an estimate amounting to Rupees 700, for constructing stone-in-mud, parapet walls round sixteen wells, in the Infantry Lines at Mercara.

2. This estimate was framed by the Executive Engineer, Coorg Division, and forwarded to the Executive Engineer, Bangalore, by the Chief Engineer of Mysore, for sanction.

No. 115. Order thereon, 4th May 1867, No. 1,349.

MILITARY WORKS, No. 13.

The estimate is sanctioned, funds being provided from the Reserve under "Military." The Government are, however, of opinion that the parapet walls should be built of brick or stone *in chunam*, instead of stone *in mud*, as the latter is very liable to injury from the constant action of water.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 5th Division,
" Accountant General.
" Controller of Public Works Accounts.
" Military Department.

Exd. S. T. Augustin.

Estimate of the probable expence for Constructing Stone in Mud Parapet walls round 16 wells in the Infantry Lines at Mercara.

References

Commanding Officer's No. 198 dated 8th December to the Chief Engineer.

Chief Engineer's reply No. 4296 dated 11th December 1866.

Commanding Officer's No. 202 dated 18th December to the Chief Engineer

Chief Engineer's No. $\frac{4463}{3866}$ dated 20th December to the Executive Engineer

Report

The proposal contained in the correspondence above quoted was to have Parapet walls of Brick in Chunam round the wells with Flag stone paving 20 feet wide. The wells are so peculiarly situated being simply a few holes under precipitous scarps on a steep hill side that Brick in Chunam walls and Paving are quite unsuited.

The accompanying section will serve to

show the character of the wells.

In some cases the scarps are 4 and 5 yards high while the depth of water in the wells varies from 3 to 6 feet The sides in several instances are crumbleng away so that in order to have Masonry Parapets the undertaking must be pucka throughout and the sides of the wells lined with stone carried up to the top of the scarp.

Supposing then considerable expense were incurred in Carryng out this job; What would be the benefit derived & Nothing to justify so heavy an outlay as will be seen from the following facts.

The wells are all situated in the middle of the Lines back but close to heap of rubbish and filth collected in a pile close by. Portion of this is carried by the first shower over the sides of the hill into the well while portion sinks into the ground. This latter in time from the percolenching it receives must contaminate the Spring that feeds the well. Even admit that there would be no ill-effect from the latter. A masonry Parapet round the well would not prevent percolation

The masonry Parapet in this respect therefore would be useless while a flagging round the wells from their peculiar position as already explained would be impracticable The only utility therefore in a parapet wall would be the checking of the surface drainage which might also be effected by a less expensive process.

A stone in mud wall of substantial thickness with a small Chuck drain on the upper side would serve the purpose and it is to provide for these therefore that this Estimate has been framed.

The rate is rather high but Considering that the Quarry is over a mile distant and a very steep and Rugged Road to be traversed over it is by no means too much.

Specification

There will be no object in giving the stone in mud parapets. Much foundation for the top coil round the wells is of any thing harder and more firm than lower down. The sites however will be Cleared and levelled before commencing the building of the foundations which

are to be one foot deep. Surface drainage cannot then penetrate under. The parapets of stone in mud above are to be two feet high and two and half feet thick. The mud must be well worked. No round boulders to be admitted into the parapets. Nothing but good flats and rectangular stones of fair size for building to be used.

Time

With the assistance of the Khagas it is expected that the work can be finished within a Cycle of months.

Particulars.	No.	Measurement. L.	B	D	Quantity.	
Stone in Mud including foundations.						
1st Well, parapet & Back Emambaud	"	16	2½	3	120	
2nd do Habildar Nadaf Ramzany	"	16	2½	3	120	
3rd do. Syed Khan	"	28	2½	3	210	
4th do near big spring	"	48	2½	3	360	
5th do. Close to above.	"	20	2½	3	150	
6th do Dfy. Havildar Dzinca	"	20	2½	3	150	
7th do Jemmadar Shaik Emaum	"	40	2½	3	300	
8th do Adam Khan	"	24	2½	3	180	
9th do Maistry's House	"	48	2½	3	360	
10th do Close to above.		30	2½	3	225	
11th do. Havildar Rajas		28	2½	3	210	
12th do. big rock well		56	2½	3	420	
13th Nazarene wells		32	2½	3	240	
3 Other wells large near Rear Guard		168.	2½	3	1260	
Total Cubic feet Stone in Mud.					4305	or 159 Cubic
Excavation Foundations for above.		57½	3	1	1722	172 2

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Abstract

Items.	Per	Rate.			Quantity	Cost.	
Roughstone	Cft	4	"	"	159	636	
Earthwork	Cft	"	"	3½	1722	7	
Making Check Brass and other sundry jobs	"	"	"	"	"	24	
					Total Rupees	667	
					Contingencies	33	
					Grand Total	700	

P.W. Department.
Central Office.

Executive Engineer's Office
Cauvery Division

Chief Engineer
of Mysore.

Executive Engineer
Cauvery Division.

Mercara
26th March
1867.

Ed Mrd Lieut Col R.E
Superintending Engineer

Superintg Engrs Office, 5th Division,
Cuddalore, 25th April 1867.

No. 21.

From,

Lieut.-Colo. C. A. Goord R.E.,
Superintending Engineer,
5th Division.

To,

Colonel C. A. Orr R.E.,
Secretary to Government,
P.W.D.

Sir,

Enclosure.
1 Estimate.

With reference to G.O. No. 3720 of the 22nd November last, I have the honor to submit, for the sanction of Government, an Estimate amounting to Rupees 700 for constructing Stone in mud Parapet walls round 16 wells in the Infantry Lines at Mercara.

2- This Estimate was framed by the Executive Engineer, Coorg Division, and forwarded to the Executive Engineer, Bangalore, by the Chief Engineer of Mysore, for Sanction.

I have the honor to be
Sir,
Your most Obedient Servt.

Ed Ford Lt. Colo R.E.
Superintg Engineer,
5th Division

Estimate for
Rs. 700

Estimate for constructing Stone in mud Parapet walls round 16 wells in the Infantry Lines at Mercara,

Rs 700

Rs 700

Prov. Govt. for Mary
No 1542

From,

The Supt.g Engineer.
5th Division

To,

The Secretary to
Government D.P.W.

Dated 25th April 1867
Recd 29 " "

No. 21.
Encl: I.

C.E. 1349 - 4th May 1867

Submitting for sanction an Estimate amounting to Rs 700 for Constructing Stone in mud Parapett walls round 16 wells in the Infantry Lines at Mercara.

Nos 114-115

C. 1st May 1867 R. 3rd May 1867

Petn and Bills

C.E. 1349

I doubt both the idea of stone in mud building in connection with water. I fear the masonry work will get wetted and decayed before long. Indeed with both stone and brick by Departmental Rate of Coll. Orr or reflection thereon, the proposed Method is unsafe. I refer with the adm. N. Military Work No. The Estimate is sanctioned, funds being provided from the Reserve under "Military" - The Supt. are however, of opinion that the parapet walls should be built of brick or stone in lime.

N. B.

Chunam, instead of stone in mud, as the latter by loss Dr. is very liable to injury by the constant action of water.

Contd Mem -
Ins. Dept -

30
Dept. 6/67

Fort St George
4th May 1867