M.R.O. 1—77,000—8-6-37.

(1) Number of pages

(2) Date of repair

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 822 (W.) Press/Mis.

Dated [illegible] 10 [illegible] 18[illegible].

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

1st October 1877, No. 821 W.

Buildings and Roads.
Military Works.

Read the following paper :—

No. 22. Proceedings of Government, Military Department, dated 20th April 1877, No. 2,385.

No. 22-A. From W. LEGGATT, Esq., A.I.C.E., Officiating District Engineer, Bellary, to the Chief Engineer, Public Works Department, Buildings and Roads, dated Bellary, 11th June 1877, No. 1,028.

WITH reference to your memorandum, No. 1,195, dated 7th May 1877, I have the honor to retransmit the plan connected with the provision of surface drains to the family quarters of the European Infantry accompanied by sections and a detailed estimate.

1 Plan.
1 Section.
1 Detailed estimate.

No. 22-B. From the same Officer, dated Camp at Hamavaty, 23rd August 1877, No. 2,095.

WITH reference to your memorandum, No. 1,640, dated 16th June 1877, I have the honor to submit a revised estimate of Rupees 4,810, with accompaniments as per margin, for providing cut-stone drains to the family quarters of the European Infantry at Bellary; and to state, in reference to paragraph 1 of the memorandum in question, that the drains provided for the back-yards in the original estimate were not intended to drain the yards only, but were made sufficiently large to allow water from the tubs used in the bath-rooms and dirty water from cook-houses, &c., to be emptied into them without soiling the ground. The drains between the blocks of family quarters correspond in size with the existing drains about the barracks.

Revised Papers.	*Original Papers.*
1 Detailed Estimate.	1 Detailed Estimate.
1 Abstract do.	1 Abstract do.
1 Report.	1 Report.
1 Plan.	2 Plans.

2. The original papers are also herewith sent for reference

No. 23. ORDER THEREON, 1st October 1877, No. 821 W.

THE plan and estimate of Rupees 4,810 for providing cut-stone surface drains for the family quarters of the European Infantry at Bellary are sanctioned. Provision will be made for the work in the Budget for 1878-79.

2. This sanction has been registered as Imperial No. 66 B of 1877-78.

(True Extract.)

Colonel, R.E.,
Secretary to Government, P.W.D.

To the District Engineer, Bellary.
" Examiner of Public Works Accounts.
" Military Department.

Exd. J. W. Fischer.
Spare Copies

with one plan

No 1195 of 7th May /77

Memorandum

F

The Dist Engr Bellary is requested to be so good as to furnish this Office at an early date with a detail Estimate for providing Compound [illegible] to the Domestic Quarters & Latrines on A.B & C.D— as pointed out in the accompanying Plan —

To The Dist Engr
Bellary

7/5/77

No 1195

P. W. Dept

Memorandum.

The District Engineer Bellary is requested to be so good as to furnish this office at an early date with a detail estimate for providing surface drains to the Family Quarters and sections on A. B and C. D as pointed out in the accompanying plan.

Fort St George }
7th May 1877 }

Sd/ W. Farewell Colonel.
Dy Chief Engineer
P. W. D.

To
The District Engineer - Bellary -
with one plan.

Proceedings of the Madras Government, Military Department,
20th April 1877.

Barracks and Buildings.

Read the following letter :—

No. 380. From Brigadier-General H. O'CONNELL, Quartermaster-General, to Colonel J. MICHAEL, C.S.I., Secretary to Government, Military Department; dated Fort St. George, 7th April 1877, No. 2765.

The Commander-in-Chief having approved the plan and estimate marginally noted, I am directed by His Excellency to submit them for the consideration and orders of Government.

2. If approved by Government, it is requested that the papers may be forwarded to the Department Public Works for disposal.

Enclosures 3.

Plan, report and abstract estimate Rupees 9,390, for providing surface drains for the family quarters of the British Infantry at Bellary.

The Brigadier-General Commanding Ceded Districts reports that at present there are no drains. Water from the tubs in the bathing-rooms and from the kitchens either sinks into the soil of the yards or runs into the lanes behind the blocks of buildings, and stagnates there.

The local medical authorities have pressed the necessity for carrying out the project, owing to the fetid smell about the back yards of the quarters, which is attributable to the want of drainage. The Surgeon-General, British Medical Service, approves of the proposed scheme, which he considers is in accordance with sanitary principles.

No. 381. ORDER THEREON, 20th April 1877, No. 2385.

Approved generally, and transferred to the Public Works Department for the consideration and orders of Government.

(True Extract.)

J Michael. Colonel,
Secretary to Government.

To the Quartermaster-General, with three enclosures.
" Public Works Department. with office Copies of three enclosures

P.W.D.
25 JU 877
No. [illegible]

Ch. No 1195 d/ 7 May/77 + plans to E.E. Bellary

G.O. 15 Octr /77 [illegible]

Cn 29-9-77 R1-10-77

9

No 1028 District Engineer's Office
Bellary
Dated 11th June 1877

From

The Offg District Engineer
Bellary

To

The Chief Engineer
for Buildings and Roads

Sir

With reference to your Memorandum No 1195 dated 7th May 1877, I have the honor to retransmit the plan connected with the provision of surface drains to the Family Quarters of the European Infantry accompanied by sections and a detailed Estimate.

I have the honor to be
Sir
Your Most Obedt Servt
Mezzett A.I.C.E.
Offg District Engineer

P.W.D.
14 JUN 77
No 5844

From

The Offg Dist Engr
Bellary

To

The Chief Engineer
Buildings & Roads

No 1028

Dated 11th } June 77
Recd }

Enclosures 3+ Returned
~~Memo No 1648 of 16th June/77~~
Reminder " 1640 " 4th Augst/77

Drains to the Family Quarters of the E. I. —

Retransmitting plans connected with the provision of —

G.O. 1st Octr/77 No 22A

Ar 29-9-77

Report to accompany the Estimate for Providing Surface Drains for the Family Quarters European Infantry

Amount of Estimate Rs 9390 " "

To Carry out the improvement desired it is proposed to lay down Short drains in each back Yard into which water can easily be thrown from all three out houses attached to each set of quarters, the openings into the Yards will require enlarging to make room for the drains and allow free passage for people going in or out, the Short drains will fall into a long drain passing in rear of each range of quarters and these will be Connected with existing drains as shown in plan.

The new drains will be of the same description as those about the Barracks Viz: Slabs 3' wide and 7" deep Chisel Cut on the upper surface as shown in the Sketch and laid in a bed of well rammed gravel.

The lengths of Slabs will average 6 to 8 feet and the joints will be neatly pointed with Chunam.

The general out fall is about 1 in 100.

Lieut.
Assistant Engineer in charge
Bellary Range

Bellary }
22nd February 1877 }

P.W.D.
23APR77
No. ~~[illegible]~~

From
The Officer in charge
Bellary Range
To
The District Engineer
Bellary
Dated February 1877
Numbered

Reports to accompany the Estimate for providing Surface Drains for the Family Quarters European Infantry

2nd October 77 JB 22 A

Detailed Estimate
Bellary Range

Work. Providing Surface Drains for the Family Quarters European Infantry

Particulars	No.	Measurement L	B	D	Contents
Cut Stone Slab drains 3' wide laid in wet tamped Gravel complete					
Short drains in back yards	96	30	"	"	2880
Drains in rear of Ranges	6	264	"	"	1584
" from Ranges 5 to 6 existing drains	1	153	"	"	153
" " 1.2.3 & 4 to do Culverts	1	460	"	"	460
Total L. ft.					5077
Enlarging Entrances into back yards					
Removing stone in clay	96	3	1 1/2	5 1/2	Cft. 2376
Rebuilding the same at edges new	96	1	1 1/2	5 1/2	792
Wall plastering and blue washing at edges	96	3 1/2	5 1/2	"	Sft. 1848
Carting debris 1/4 mile	1	"	"	"	88 yds

Bellary
25th May

Lieut.
tive Officer
Bellary Div

P.W.D.
14 JUN 77
No. 5914
3

From

The Executive Officer
In ch. of Bellary D.

To

The District Engineer
Bellary

Dated 25 May 1877

Recd

Detail Estimate
amounting to Rs 9390
Work Providing surf
Drains for the family
E. I. at Bellary —

G.O. 1st October/77 I.B. No. 22

Abstract Estimate

Bellary District

Work. Providing Surface Drains for the Family Quarters European Infantry.

Vide District Engineer No. 4573 dated 1st February 1877.

Quantities		Description of work	Rate	Per	Amount	Total
5077	L ft	Cut Stone slabs 3" wide laid in & well ramped	1 4 .	L ft	8567 . .	
2376	C ft	Removing Stone in Clay	. . 2	C ft	25 . .	
792	"	Rebuilding the same at edges here	. 1 9	"	87 . .	
1848	Sq yd	Wall pointing & blue washing at edges	1 4 .	Sq yd	35 . .	
88	C yd	Carting debris 1/4 Miles	. 3 9	C yd	21 . .	

Total — 8735 . .

Superintendence @ 3½ per cent — 306 . .

Sundries @ 1½ per cent — 131 . .

Contingencies @ 2½ per cent — 218 . .

Total Estimate Rupees — 9390 . .

Saving Rs 374

A.I.C.E.
Offg. District Engr. Bellary.

Bellary Range Office
22nd February 1877

Lieutt.
Assistant Engineer in charge Bellary Range

G. 1st October, 77 Able 77

From

The Officer in charge
Bellary Range.

To

The District Engineer
Bellary.

Dated February 1877.
Received

Abstract Estimate
amounting to Rupees — 9890 —
for Providing Surface Drains
for the Family Quarters
European Infantry.

23APR77

Sr No 2541.

Bellary

19F

Detailed Estimate

Bellary District Bellary Range

Revised Estimate of the cost of providing Surface drains for the Family Quarters European Infantry.
Vide Distt. Engineer's Endorsement. No 1173 Dated 20th June 1877.

Description of Work	No	Measurement L	B	Depth	Contents
Excavation					
For small drains in the back yards	✓ 96	30	1½	1	✓ 4,320
" Drains in rear of ranges	✓ 6	264	2	1	✓ 3168
" " from Ranges 5 & 6 existing drains	1	153	2	1	✓ 306
" " " " 1, 2, 3 & 4 " "	✓ 1	460	2	1	✓ 920
Total Cft.					✓ 8714
or Cyds.					✓ 322.74
Gravel wet tamped					
Beds of small drains	✓ 96	30	1½	½	✓ 2160
Sides " Calculated in to one instead of 2	✓ 96	30	½	½	✓ 720
Beds " Larger	✓ 1	2197	2	½	✓ 2197
Sides " "	✓ 1	2197	½	½	✓ 549.25
Total Cft.					✓ 5626.25
or Cyds.					✓ 208.37
Cut Stone Slab drains 1 foot wide					
From small drains to existing drains	1	2197			✓ 2197 [illegible]

Meggett A.I.C.E.
Offg. Dist Engineer
Bellary

Central Office
27/7/77

21

Abstract

Quantities	Particulars of work	Rate	Per	Amount	Total
322.74	Cyds Excavation	„ 2 „	Cyds	40 „ „	x
208.37	„ Gravel wet tamped	„ 6 „	„	78 „ „	x
2880	Sft Cut Stone Slab drains 1 wide	„ 12 „	Sft	2160 „ „	x
2197	„ „ „ 1½ „	1 „ „	„	2197 „ „	x
	Total			4475 „ „	x
	Superintendence @ 3½ percent			157 „ „	1
	Sundries @ 1½ percent			67 „ „	
	Contingencies @ 2½ percent			111 „ „	
	Total Estimate Rupees			4810 „ „	

Bellary
July 1877

Wm [illegible]

Executive Off. in charge Bellary Divn.

[illegible]

From

The Executive Officer
incharge Bellary Divn.

To

The District Engineer
Bellary

Dated 8th August 1877

Received

Revised

Detail Estimate

Work Providing Surface Drains
for European Family Quarters
Amount of Estimate Rupees 4810 — —

Abstract Estimate

Bellary District Bellary Range

Work. Providing Surface Drains for the Family Quarters European Infantry.

Vide District Engineer Endorsement No. 1173 Dated 20th June 1877.

Quantities	Particulars of work	Rate	Per	Amount	Total
322.74	Cyds. Excavation	2	Cyds.	40	
208.37	— " — Gravel well rammed D°	6	— " —	78	
2880	Sft. Cut Stone Slab drains 1 wide	12	Sft.	2160	
2197	— " — " — 1½	1	— " —	2197	
	Total				4475
	Superintendence @ 3½ percent				157
	Sundries @ 1½ percent				67
	Contingencies @ 2½ percent				111
	Total Estimate Rupees				4810

Passed for Rs 4810.
G.O. No. 821 of -10-77

Bellary
8th August 1877

Lieutt.

Executive Officer incharge Bellary Divn.

A.C.I.
Offg. Dist. Engineer
Bellary

From.

The Executive O

incharge Bellar

To,

The District E

Bellary

Dated 8th August 1877

Received

Revised

Providing Surface Dra
for the family Quarters Eu
Infantry Amount of Estimate
Rupees 4810 – " – "

G. 1st Collector // J.B. No. 22

Report to accompany the Revised Estimate for providing Surface drains for the Family Quarters European Infantry.

Amount of Estimate Rupees 4810 – " – "

In Compliance with the instructions of the Chief Engineer the proposed widths of the drains are reduced to 1 foot and 1½ foot.

The Smaller drains will be laid down in each back Yard to receive the waste water from all three out houses attached to each set of Quarters and will lead into a long drain passing in rear of each range of quarters and these will be, Connected with the Existing drains as shown in the plan–

The long drains in rear of the quarters and the Connecting drains mentioned above will both be of the larger Section Vizt 1½ wide–

All the drains will be laid, in a bed of well tamped hard gravel, the lengths of Slabs will average 6 to 8 feet and the joints will be neatly pointed with Chunam–

Bellary
8th August 1877

Executive Officer incharge Bellary Divn

Revised Report

G O No. October /77 S B No. 2213 -

No. 2095

Bellary Dist Engrs Office
Camp Hampsagar
23d August 1877.

29

From

The Offg District Engineer
Bellary

To

The Chief Engineer
for Buildings and Roads
&c, Madras

With reference to your Memorandum No. 1640 dated 16th June 1877, I have the honour to submit a revised Estimate of Rs 4810, with accompaniments as per margin for providing cut stone drains to the family Quarters of the European Infantry at Bellary; and to state in reference to para 1 of the Memorandum in question that the drains provided for the back yards in the original Estimate were not intended to drain the yards only, but were made sufficiently large to allow water from the tubs used in the bath rooms and dirty water from Cook houses &c to be emptied into them without soiling the ground. The drains between the blocks of Family Quarters correspond in size with the existing drains about the Barracks.

2. The original papers are also

herewith sent for reference.

I have the honour to be

Sir

Your most obed. servant

W Legrett A.S.Ca

Offg. District Engineer

Bellary

Buildings & Roads

No 8383

From

The Offg Dist Engr
Bellary

To

The Chief Engr
Buildings & Roads
P. W. D.

No. 2095

Dated 23 }
Desp. 28 } August 77
Recd. }

Enclosures 9 5

Made over to the Librarian 9/10/77

Family Quarters of E. I. Bellary. —

Submitting revised Estimates &c. of Rs 4,810 for providing cut stone drains to the —

6 1st October by IB No. 2213

a 29-9-77 A1-10-77

B & R mily works

No. 8218

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 1st Octr/77.

Read the following :—

Proceedings Military Department (A. G. No. 2385 d/ 20th April 1877)
From District Engineer, Bellary (" " 1028. " 11th June 1877)
Do. Do. Do. (" " 2095 " 23d Augt 1877)

The plan and Estimate of Rs 4,810 for providing Cut stone surface Drains for the Family Quarters of the European Infantry at Bellary are sanctioned. Provision will be made for the work in the Budget for 1878-79

Wh
28.9.77

This sanction has been registered as Imperial No. 65 B. of 1877-78.

To
The Dist. Engr Bellary }
" Examiner P. W. A. }
" Military Dept. }

17

Desp 6-10-77

Le 29. 7. 77 (Rot-10-7)

Co 8383
4203

of 1877, Madras.

PUBLIC WORKS.

To

D. E. Bellary

Dated

Issued

Recd. Encl.

G. O. 1st Febr 1877, No. 821 W

Nos. 22-93

Family Quarters of the European Infantry at Bellary. Sanctions plan & estimate of Rs 4810 for providing cut stone surface Drains for the —

30. 10. 77.

Ev 29. 7. 77 A1-10-77