

(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.	1496	(w)	Press
B.P. No.			Mis.
Dated	16 - 6 -		1876

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
16th June 1876.*

Read the following papers :—

No. 268. From the District Engineer, Bangalore, No. 180, dated 25th January 1876.

No. 268-A. From " " No. 210, " 29th March "

From Major R. THOMPSON, R.E., Officiating District Engineer, Bangalore, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Bangalore, 23rd May 1876, No. 36.

REFERRING to your memorandum, No. T-181, of 9th May 1876, I have the honor

- | | |
|--|---|
| <p>1 Revised Estimate with Specification.
1 Revised Plan.
1 Standard Plan.
1 Letter No. 529, dated 5th May 1876, from General Superintendent of Public Works Stores and Workshops.
1 Estimate accompanied the above.</p> | <p>to submit a revised plan and estimate, amounting to Rupees 600, for providing a first-class Duff's Cooking Range in the Cook-house of the Royal Horse Artillery Barracks, Ulsoor, Bangalore.</p> |
|--|---|

2. Two such ranges were called for by the Assistant Quartermaster-General, Mysore Division, in his original requisition; but, as each range is capable of cooking for 150 men, the General Commanding the Mysore Division considers that one will be sufficient.

3. A brick chimney has been provided instead of the iron one originally estimated for.

4. The rate for the range in the original estimate, viz., Rupees 425 was obtained from the General Superintendent, Public Works Workshops and Stores, in his letter, No. 1,841, of 12th August 1875. His reduced rate, viz., Rupees 350, as furnished with your memorandum under reply, has now been entered in the revised estimate.

No. 269. ORDER THEREON, 16th June 1876, No. 1,496.

MILITARY WORKS, No. 9.

- (a) *Heads of Service.*—Imperial.
Fund.—Ordinary.
Class.—Original Works.
Main-head.—Military.
Sub-head. *Military Buildings.*—Accommodation for European Artillery.
Name of Work.—Duff's Cooking Range for Cook-house of Royal Horse Artillery, Ulsoor Barracks.
Amount.—Rupees 600.
To be carried out by the Public Works Department.

His GRACE the Governor in Council sanctions the estimate of Rupees 600 for constructing a first size Duff's Cooking Range in the Cook-house of Royal Horse Artillery in Ulsoor Barracks at Bangalore.

2. Funds will be provided by the District Engineer from the grant at his disposal under "Minor New Works, Military."

3. The above sanction has been registered as Imperial No. 37 W. of 1876-77.
(True Extract.)

Colonel,

Offg. Under Secy. to Govt., P.W.D.

To the District Engineer, Bangalore.
" Examiner of Public Works Accounts.
" Military Department.
Exd. E. C. Shunker.
Spare Copies

Carried over

Imperial Military Original Works
Revised Detail Estimate No. 16 of 1876/77

District Bangalore

Work in constructing a First size Duff's cooking
Range in the Cook House of P. H. M. Alwar
Barracks at Bangalore
vide by Chief Engineer's letter No. 181 of 9th May 1876

Particulars of work ^{Measurements} Contents Total

Excavations

Pier under cooking range	1 4 1/2 2 1/2 1 1/2	14 1/2
do do	1 4 1/2 2 1/2 1 1/2	15 3/8
do under chimney	2 3/4 1 1/4 1 1/2	2 7/8
do under Range	1 4 1/2 1 3/4 1 1/2	11 1/8
do do	1 4 1/2 2 3/4 1 1/2	18 9/16

Total of excavations 62 7/16

do Foundation bricks in clay 62 7/16

Superstructure

Under cooking range	10 3/4 4 2 1/2	106 3/4
Above do	4 3/4 4 3 1/2	66 5/8
do do for chimney	2 1/2 3/4 6 1/2	11 1/32
Chimney over Range	1 2 3/8 2 1/4 20	96 47/48
Total		283 165/128

Deduction

Archway under Rectangular portion	2 1 1/2 4 3/4	9
cooking range Semi circular portion	2 7/8 4	7
Carried over		16

Particulars of work
 Measurement
 No. L B D Contents Total

Brought Over 16
 Archway under Rectangular portion 1 1 $\frac{3}{4}$ 3 $\frac{3}{4}$ 2 $\frac{7}{8}$
 Chimney Semi circular portion 1 $\frac{7}{8}$ and $\frac{3}{4}$ 2 $\frac{1}{4}$
 Arch under Rectangular portion 1 $\frac{5}{8}$ 4 1 3 $\frac{1}{2}$
 fire place Semi circular portion 1 $\frac{1}{4}$ and $\frac{1}{4}$ 1 $\frac{1}{2}$
 Archwork 2 4 2 $\frac{1}{2}$ 3 $\frac{3}{8}$ 7 $\frac{1}{2}$
 do. Under fire place 1 $\frac{1}{4}$ 1 $\frac{1}{4}$ 2 2 $\frac{5}{8}$
 do. Under chimney 1 $\frac{3}{4}$ 2 $\frac{3}{8}$ 9 $\frac{9}{16}$
 Iron Oven 1 2 2 2 $\frac{1}{2}$ 10 $\frac{1}{2}$
 Door to do. 1 2 $\frac{1}{2}$ 3 $\frac{1}{4}$ 2 $\frac{3}{4}$ 4 $\frac{11}{16}$
 Boilers 1 2 $\frac{1}{2}$ 1 $\frac{1}{4}$ 1 4 $\frac{3}{8}$
 Deduct Quantity of Fire Brick 28 $\frac{17}{32}$
 Total Deduction 81 $\frac{27}{32}$

Total cft of superstructure brick in clay 201 $\frac{105}{164}$

Fire brick in fire clay

Under iron plates 1 5 $\frac{1}{2}$ 3 $\frac{3}{8}$ 7 $\frac{9}{16}$
 Top and bottom of iron oven 2 3 $\frac{5}{16}$ 3 $\frac{7}{8}$ 7 $\frac{11}{16}$
 Sides to do. 2 3 $\frac{3}{4}$ 3 $\frac{1}{8}$ 8 $\frac{7}{16}$
 Back to do. 2 $\frac{1}{2}$ 2 $\frac{1}{2}$ 3 $\frac{1}{8}$ 2 $\frac{1}{2}$
 Around the flue 4 5 $\frac{1}{4}$ 3 $\frac{1}{8}$ 2 $\frac{11}{32}$

Total cft of Fire brick in fire clay 28 $\frac{17}{32}$

Arch work common brick in clay 8

do. Fire brick in fire clay 3

Plastering

Around the chimney outside 1 8 $\frac{5}{8}$ 2 17 $\frac{2}{3}$

Total sq of Plastering with chimney 176 $\frac{2}{3}$

Particulars of work

Measurement
 No. L B D Contents Total

Dismantling a portion of the
 roof and re-roofing the same for
 chimney

1 . . . 1 1

L B
 H D Draughtman

(70)

Suppl. Military Original

Revised Abstract Estimate No. of 1876/77

District — Bangalore

Work — Constructing a First Size Duff's Cooking Range in the Cook House of R. H. A in Ulloor Barracks at Bangalore. vide Dy. Chief Engineer's letter c/o 701 of 9th May 1876.

Quantity	Description of work	Rate	Amount	Total
62	Cft of Excavation	1 cft.	52	✓
62	Foundation brick in clay	19	6 12 6	✓
203	Superstructure — Do.	19	22 3 3	✓
29	Do. fire brick in fire clay	6	10 14	✓
8	Archwork brick in clay	3	1 8	✓
3	Do. fire brick in fire clay	8	1 8	✓
1.77	Sq of Plastering with chunam	2 8	4 6 9	✓
	Dismantling a portion of the roof for chimney and re-roofing the same		8	✓
1	Cooking Range complete		350	✓
	Cooking Utensils copper		125	✓
	Railway charges from Madras to Bangalore		40	✓
			570 9 8	

Sundries — 29 6 4
Total Estimate Rupees 600

Lt Col
H. D. D. Tamm

Dist. Engr's office
Bangalore
23rd May 1876

Major R. E.
Offg. Dist. Engineer

Specification to accompany Plan
and Estimate for constructing a First Size
Duff's Looking Range in the look out
of R. & A. Udoo Barracks at Bangalore

Amount of Estimate Rupees 600-

A First size Duff's Looking Range
(10' $\frac{2}{3}$ x 4') will be provided and fixed for
the look house. The pier under the
Looking Range and wall around the
Iron Oven will be built of brick in
clay except the interior which will be
of fire bricks in fire clay leaving
3 inches space under plates and 4 in-
ches all around the Iron Oven for flues.
A chimney 2' $\frac{1}{2}$ x 2' $\frac{1}{8}$ at bottom and 2' $\frac{1}{2}$ x 1' $\frac{1}{2}$
at top and 20 feet high will be con-
-structed on the Iron Oven leaving a
hole of 12" x 8" in the centre. The chimney
will be built with brick in clay
and plastered with two coats of
chunam. Foundation for the
work will be built of the same
materials.

No 45 of 1876.77.

Estimate of the probable cost of Brass and Iron work only for one 1st class looking Range enough to cook for 150 men.

Particulars of work	No	Quantity	Rate	Per	Amount
Iron flat 9" x 1/2"	17	256			
" " 15" x 3/8"	8	150			
" " 15" x 1/2"	8	200 1/2			
" " 4" x 1/4"	12	40			
" " 1" x 1/4"	16	13 1/2			
" " 3" x 1/2"	28	140 1/2			
" " 2 1/2" x 1"	22	183 3/4			
" Sheet 2 1/2" x 1/4"	12	300			
" round 3/4"	14	20 1/2			
" " 1/2"	14	9 1/4			
" " 3/8"	25	9			
" " 1/4"	60	9 3/4			
" Angle 2" x 2" x 3/8"	14	70			
" " 1 1/2" x 1 1/2" x 3/8"	24	60			
" T 3" x 3" x 1/2"	4	40			
" round Swedish 1/2"	6	4			
" flat " 2 1/2" x 1/4"	6	12 1/2			
" " " 3" x 3/16"	6	11 1/4			
" " " 9" x 1/2"	3	45			
" " " 2 1/2" x 1/4"	8	16 1/2			
		1592	33	th	323 6
Brass castings	th	10	1	"	10
					333 6
Contingencies at 5 percent					16 10
Total Estimate of Brass and Iron work only for one Range					350

P. 42763/46

Iron
 The District Engineer
 Bangalore.
 Dated 23.5.77
 Recd J. May 17th
 Revised Estimate
 and Specification
 for Constructing a
 1st class Buffs Cooking
 Range with Cook-
 house of R.H. & Elms
 Residency Bangalore
 Amounting to Rs 600

Presidency workshops
 Bangalore
 10th April 1878
 5th May
 E. H. H. H.
 District Engineer
 Bangalore
 J. H. H. H.
 District Engineer
 Bangalore

No. 529.

PRESIDENCY DISTRICT ENGINEER'S OFFICE,

Fort Saint George,

5th May 1876.

From

THE DISTRICT ENGINEER,

PRESIDENCY,

To

THE Chief Engineer, and
Secretary to Government,
P.W.D.

Sir,

With reference to your Memo. No. 616 of
3rd April 1876, I have the honor to forward
a plan and estimate amounting to Rs 350.
for a 1st class Cooking Range, enough to
cook for 150 men submitted by the General
Superintendent of P.W. Stores &c.

2. The estimate does not include brick-
work. The total weight of brass and iron
works is 1602 lbs.

3. The cost of masonry work will be
about Rs 220.

I have the honor to be

Sir,

Your most obedient servant

Major R. H.

Off. District Engineer
Presidency.

W. G. J.

P. 9. 3295/76

P. 9. 3763/76
2/11

Incl.

1. Estimate.

1. Plan.

L. H. 1876 Department
 No. 3297

To, the Chief Engineer,
 The District Engineer,
 Bangalore.
 Dated 5th May 1876.
 No. 529.
 General plan and
 estimate for the
 provision of a
 first class Duff's
 Cooking Range
 submitted by the
 General.

OFFICE, May 1876
 No. 3297
 The District Engineer,
 Bangalore.
 Chief Engineer D. P. H.
 Madras.

- Encls: 5
- 1. Revised plan with specifications
- 1. Standard plan
- 1. Letter 529 of 5th May 1876 from Chief Engineer to P. H. Madras
- 1. Estimate as above

Adverting to your letter of 18th of 9th May 1876, I have the honor to submit a revised plan and estimate amounting to Rs. 181 for providing a first class Duff's Cooking Range in the Cook House of the A. H. C. Barracks, Bangalore.

Two such Ranges were called for by the Assistant Quarter Master General, Mysore Division, in his original requisition. But as each Range is capable of cooking for 150 men, the General commanding the Mysore Division considers that one will be sufficient.

A brick Chimney has been provided instead of the iron one originally estimated for.

The ¹¹ the Range in
 the original estimate viz. Rs 425
 was obtained from the General
 Superintendent Public Works -
 Workshops and others in his letter
 No 1841 of 12th August 1875. His
 reduced rate viz Rs 350 as furnished
 with your letter under reply has
 now been entered in the revised
 Estimate.

and it shall be the honor to the
 Government to have the same
 estimated as well as the other
 and in the year 1876-77. The
 estimate of the year 1876-77
 shall be submitted to the
 Government.

Offg. District Engineer

The original estimate
 of the year 1875-76
 was Rs 425 and the
 revised estimate of
 the year 1876-77
 is Rs 350. The
 difference of Rs 75
 is the amount of
 the reduction.

for the
 year 1876-77
 the estimate
 of the year
 1875-76 was
 Rs 425 and
 the estimate
 of the year
 1876-77 is
 Rs 350.

11/8-98

The
 District
 Engineer

The
 District
 Engineer

The
 District
 Engineer

P. H. 1876 Department

80-3763

Received a first
class supply of
cans in the 600
lower of the 600
class of cans -
received a first
class estimate for
the 600 for - with
certain specifications
called for -

From
The District Engineer
Bangalore.
To The Chief Engineer
P. H. Deptt.
Dated 23-3-76
Recd 24-3-76
P. H. Deptt.
Bangalore.

64-2014
7-3295
+ 100 to 1000
64-2014
7-3295
+ 100 to 1000
MEMORANDUM.
181-79/3-76

Letter Number 100

dated the 25 March 1876

from the District Engineer of Bangalore

The Pan had intended to
accommodate the same later
and intended to be 2. 1000
for Revision with reference
to the following summary.

1. The number of men the
Cotton for in a Battery
with 14. 1000 each and
150. 10. which take it to be
higher than the 1/1000
stone to be sufficient
at all points for the
men to be in the
the 1000 & 1000
men to be 1000

2. The heat radiation from
the chimney stacks
as designed would be
such as to render the
Cotton room unbearable
at the chimney for
the chimney should
be provided with
as per plan enclosed
Sufficient light for the
the 1000 and

3. The internal doors
to be constructed with
the 1000 and
the 1000 and
the 1000 and

District Engineer's Office

Dec 7. 6. 76 P. H. 16-6-76
Dec 2. 6. 76 P. H. 19-6-76

returned to the office
 at an early date so
 that the work may
 be satisfactorily pro-
 ceeded with. and will
 be ready to
 proceed

5-76

~~The same plan
 is followed at it is
 the same plan
 is followed at it is
 the same plan
 is followed at it is~~

3. It is recommended that
 the rate of interest on the
 estimate for a third
 is for the 2nd of
 what is called
 supplied for by the
 P.W. W. S. as shown
 in the estimate attached
 to the 1st P.W. S. letter.

For Sept. 1876
 The Sup. P. W. S. has
 Reports that the Iron work
 would cost \$5000 - the
 cost of the 100000 which
 seems high for carriage
 lifting - The Plans are
 identical - Except I saw
 chimney which is a mistake
 as Iron plate construction
 with a masonry chimney
 is better & cheaper -
 Should think too well
 Stone work - enough for 100
 men.

No 2357

No. 3-4-76

Copied 1/11

With reference to the
Quotation plan ~~and~~
for a Carriage Range
Acres Officially submitted
by the Sub. Dep. of Pub. W.
W. H. H. He is requested
to furnish an estimate of
the cost of the stone
work if it includes
Brick work, fire
Pipes. He is also
to the weight of the
Iron should be
given in order that
the cost of carriage
may be arrived at

Wm. H. H. H.

1-11-76

N^o 210

District Engineer's Office
Bangalore 29th March 1876

From

The District Engineer
Bangalore

To

The Officer in Charge
Public Works Department

Sir,

With reference to your Memorandum dated 3rd February 1876, N^o 247, I have the honor to report that, the Cooking Ranges which were removed as useless, were obtained from the Mint in November 1867, and are known to as "Mint Ranges" and the cost is known to be

Those now estimated for are to cook for one Battery of Royal Horse Artillery.

I have the honor to be

Sir

Your Obedt Servant
Arthur Stuart Major R.E.
District Engineer Bangalore

FORMER CASES.

Current No.

of 187

"
"
"
"

LATER CASES.

Current No.

of 187

"
"
"

Mr 1576 Dept
Hans No 2351
The District Engineer
Bangalore
to the Dy. Commr
Bangalore
Dated 19th Dec 23/10
216.

Public Works Dept.
Bangalore
to the Dy. Commr
Bangalore
Dated 19th Dec 23/10
216.

No 268a

Current No. 2351

From

The St Engineer
Bangalore

No. 210

Dated 29

Recd. 31

March 1876

Ch No 616 of 3-4-76

" " 181 " 9-5-76

Subject:—

Inform of the
date of the receipt of the
Duff's Cooking Range
and that the cost is
unknown.

ENCLOSURES.

From

to

"

"

"

"

"

"

Orders and Proceedings in file.

Depart- ment.	No.	Date.	ENDORSEMENTS.		
			Depart- ment.	No.	Dated.
P.W.	93	12/1/75			
Memo.	247	3/2/76			
"	181	7/5/76			

No 247 of 3.2.76

hence
16

With reference to his
letter No 180 dated 25-
May 1875 the St Engr
Bangalore
will be so good as
to report on the
description of the
Ranges which were
removed as useless,
when they were supplied
at what cost he
and also with
the number of
when the new
Haversham Range
are to be taken for—
By order

Wt
2.2.76

The St Engr
Bangalore
will be so good as
to report on the
description of the
Ranges which were
removed as useless,
when they were supplied
at what cost he
and also with
the number of
when the new
Haversham Range
are to be taken for—
By order

No. 180.

FROM

THE DISTRICT ENGINEER,

BANGALORE.

TO

THE Chief Engineer
P. W. D.
Madras

SIR—

With reference to G. O. No. 93 dated 12th November 1875. I have the honor to forward herewith for sanction an Estimate of Rs. 1550 with Plan and Specification for constructing 2 Duff's looking Ranges in the Cook house of O. B. 18. A. P. Barracks at this station.

The Plan and Estimate have been approved of both by the Major General commanding the Division and His Excellency the Commander-in-Chief.

I have the honor to be

Sir

Your most obedt. servant.

Herbert W. B. Major O. B.

District Engineer

62: Ings: 247 of 3/2/75
781 of 9/5/76

Print in the margin of G.C. No 1446 of 16 June 1876.

No 1496

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 16th June 1876

Read the following:—

From

The District Engineer
Bangalore } (H.C. No. 180 of 25th Jan'y/76)
" " " " } (" " " 210 " 29th Mar/76)
" " " " } (" " " 529 " 5th May/76)
" " " " } (" " " 36 " 23rd do)

His Grace the Governor
in Council sanctions
the estimate of Rs 600
for constructing a first
size Duff's Cooking
Range in the Cook
House of Royal Horse
Artillery in Ulsoor
Barracks at Bangalore.
2. Funds will be
provided by the Dis-
trict Engineer from the
grant.

D. Eng. Bangalore ✓
Capt. D. M. Aceto ✓
Military Dept. ✓ Des. 29/6/76

grant at his disposal
under "Minor New York
Military."

3. The above sanction
has been registered as
Imperial No. 37 of
876-77.

[Signature]
5.5.76.

617
2351
37 63 CH.

Gobt. of 1876: Madras.
PUBLIC WORKS.

To

The H. & Bangalore

Dated

Issued

Recd

Encl.

G. P. 15th June 1878, No.

11196

Not 268-269

First size Cuffs' Cooking
Range in the Cook House
of Royal Horse Artillery in
Niloor Barracks at
Bangalore - Estimate
of Rs. 500 for constructing
a ——— paneled

Estimate
20-6-78