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(2) Date of repair \_\_\_\_\_

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## MADRAS RECORD OFFICE.

Government of Madras.

*Public Works* DEPARTMENT.

|          |     |        |
|----------|-----|--------|
| G.O. No. | 371 | Press  |
| 47-48    |     | Mis.   |
| Dated    | 5-2 | 18 43. |

Not to be folded or roughly handled

12

*Proceedings of the Madras Government, Public Works Department,  
5th February 1873.*

No. 77. Read the following letter from the Inspecting Engineer for Civil and Military Buildings, to the Secretary to Government, Public Works Department, dated Chepauk, 24th January 1873, No. 62:—

I HAVE the honour to submit, for the sanction of Government, plans, estimates, and specifications for the undermentioned works; and to state that they have met with the approval of His Excellency the Commander-in-Chief:—

2 Plans.  
2 Abstract Estimates.  
2 Specifications.

|                                                                      |       |
|----------------------------------------------------------------------|-------|
| 1. Estimate for constructing a Shed for the fire-engine at the Main  | RS.   |
| Guard Gate, European Infantry Barracks, at Bangalore ... ..          | 510   |
| 2. Estimate for constructing a new Cook-house to the Serjeants' Mess |       |
| at do. ... ..                                                        | 630   |
| Total...                                                             | 1,140 |

2. The fire-engine shed is much required, as at present the engine has to be kept in the verandah of the Military cells, some distance away from the Main Guard-room, and the Military Authorities wish to have it placed next to the Guard-room.

3. The Serjeants' Mess cook-house of the European Infantry Barracks is in a very bad state, the walls and floor being undermined with bandicoot holes. The construction of a new one is considered absolutely necessary.

No. 78. ORDER THEREON, 5th February 1873, No. 371.

MILITARY WORKS, No. 9.

The estimates are sanctioned. The works may be put in hand in anticipation of a provision of funds, for which the necessary application should be made in the statements of savings and demands due on the 31st January. Another side window will be added to the cook-room where marked on the plan in pencil.  
(True Extract.)

Colonel, R.E.,  
Secretary to Government.

To the District Engineer, Bangalore.  
" Inspecting Engineer for Buildings.  
" Military Department.

Exd. S. T. Austin.

Specification to accompany Plan  
and Estimate for building a new Cook House  
for the Sergeants Mess European Infantry Barracks

Amount of Estimate Rs 630--

Site

The site for the new Cook house will  
be pointed out by the Executive Engineer

Excavation

The excavation for foundation to be taken  
out to such a depth as the Executive Engineer  
may consider necessary, and the bottom taken  
out perfectly level, any superfluous excavation to be  
filled in again and well rammed.

Foundation

The foundation to be laid with stone in  
Chunam stones laid closely fitted with good sand  
and well flushed up Chunam & parts of sand to two of  
fresh and well burnt lime slaked on the work  
every fourth stone at least to be a through header

Basement

The basement to be similarly laid, with  
center joints scraped out and plastered. The top  
course of the basement to be of flat stones, of  
as great a length as possible.

Superstructure

The superstructure to be of best bricks  
(9x4x2 1/2) in Chunam & parts of sand to two of  
fresh and well burnt lime slaked in the work.  
The bricks to be soaked in water before they  
are used, and English cement to be allowed  
throughout.

The

The arches to be neatly turned and Brickwork only selected hard bricks used. The joints all to radiate correctly according to the nature of the arch. Bricks to be ground down to required shape and the key bricks to be well driven home joints not to exceed 1/4 inch and to be scraped out before plastered.

The roof will be terrace roof as follows. The rafters will be placed 12 apart from Centre to Centre. They will be taken from the Old Cookhouse as mentioned in woodwork. One course of brick on edge  
3 of concrete  
3 courses of flat tiles

The description of the Cornice should be of the pattern supplied by the Executive Engineer. Cornice bricks to have proper bearing not less than 1/2 inch and set with strong lime mortar.

Stone steps first steps to be of one stone of the required dimensions according to the nature and size of the steps having outer edges and edges deepened by 1/2 inch and upper surface smoothly dressed down 6 inches.

The fireplace to be constructed in plain masonry of brick

Roofing

Woodwork  
painting &  
wood clings

Plastering

Coloring

in clay plastered with mud washed with Cow dung

The door windows rafters are that are in the present Cook house will be rebuilt in the new one. The door and windows to be properly scraped and cleaned then coated with two coats of Chocolate color paint. The rafters to be properly scraped and cleaned before being fixed after the roof is plastered and whitewashed coated with two coats of wood oil.

The joints to be scraped out and the walls plastered inside and outside with two coats of Roman first coat to consist of one part of lime to 2 of river sand well ground together and the 2nd coat to be of 1 part of lime to one of white sand well smoothed off.

The chinking to be blue washed outside and to have a uniform colour throughout to be approved of by the Executive Engineer, and to be whitewashed inside each with two coats.

The following proportions to be used in mixing the blue wash.

For blue washing 10 lbs. turpentine  
Charcoal

Charcoal sufficient to give white color  
 1 Barah of Stone Churnam  
 1/2 Bellum of Gum  
 1/4 Measure of Sand  
 For whitewashing 50 sq. two Coats  
 1 Barah of Stone Churnam  
 1/2 Bellum of Gum  
 1/4 Measure of Sand

All materials used and work done  
 to be of the best description and subject to  
 the approval of the Executive Engineer of  
 Bangalore who shall have the entire  
 power of ordering the removal of any  
 work with which he is dissatisfied.

Prep. Office }  
 Bangalore }  
 16th November 1893 }  
 Henry W. Hart. Captain R.E.  
 Executive Engineer Bangalore

Edmund Colonel R.E.  
 Inspecting Engineer for  
 Civil & Military Buildings

1/18/93

Encl: 5 in a letter  
 No 2 of 24 July 1893  
 to Secy: to Govt. of Mad.

JPW 511/73

Specification to accom-  
 pany Plan & Estimate for  
 Building a New Cook House  
 for the Serjeants Mess Eu-  
 ropean Inf<sup>y</sup> Barracks, Ban-  
 galore.

Estimate Rs 630.

Aug. 10 93

40

Specification to accompany Plan  
and Estimate for Constructing a shed for the fire  
Engine at the main Guard Gate European Infantry  
Barracks.

Amount of Estimate Paper 510-000.

The Engine shed will be built on  
the left side of the main Guard Gate against the  
west side wall as shown on plan.

Foundation

The foundation will be built with stone  
in Chunan 2 in breadth and 2 in depth, the joints  
to be well flushed in with mortar, every 5th stone  
will be a header, the full breadth of the foundation.  
The top Course of foundation will consist of  
long flat stones 2 in breadth and not less than  
3 in thickness.

Superstructure

The superstructure will be built with  
brick in Chunan, the end walls and filler in the  
Centre of the side wall to guard room, will be  
bonded in to the wall of guard room with slab  
stone every 3 feet in height, the stone will be  
12 in length 12 in breadth 3 in thickness. English  
bond to be observed throughout, for details see plan.

Arch work

The arch is to be neatly turned and only  
selected hard bricks used. The joints all to radiate  
correctly according to the nature of the arch.  
Bricks.

Bricks to be ground down to required shape and  
the key bricks to be well dried home joints  
not to exceed  $\frac{1}{4}$  inch thick and to be scraped  
out before plastered.

The joints to be scraped out and the plastering  
walls plastered inside and outside with two coats  
of Chinam, 1st Coat to consist of one part of lime  
to 4 of river sand, well ground together and the  
2nd Coat to be of 3 parts of lime to one of white  
sand, well smoothed off.

The building to be blue washed, Colouring  
outside and to have a uniform colour throughout,  
to be approved of by the Executive Engineer and  
to be whitewashed inside each with two coats.

The following proportions to be used  
in mixing the blue wash.

For blue washing 10 sq. two Coats.

Charcoal sufficient to give slate colour

1 Parah of Stone Chinam

$\frac{1}{2}$  Volume of Gum

$\frac{3}{4}$  Measure of raw rice

For whitewashing 10 sq. two Coats

1 Parah of Stone Chinam

$\frac{1}{2}$  Volume of Gum

$\frac{3}{4}$  Measure of raw rice

The fire Engine will stand on two granite

stone

stone slabs 12 in breadth 12 in thickness in plan  
The remaining portion of the flooring  
will be metalled with 3 of granite stone jelly and  
12 of Clean latite jelly before the flooring  
is laid the earth inside of the Engine shed is  
to be picked up and removed to any depth so may  
be ordered by the Executive Engineer. The  
3 of stone jelly will be laid and over this the  
12 of latite gravel.

The whole to be well watered and  
rammed until quite hard, the top course  
is to be just flush with the top of the granite  
stones, on which the fire Engine will stand.

The flooring to have a fall of 3 from  
the East to west wall, drain holes will be left  
in the latter for drainage.

Woodwork

The whole of the timber to be of  
well seasoned and sound teak, free from all  
shakes and knots, and neatly finished off.  
No timber to be put up until passed by the  
Executive Engineer.

Roof

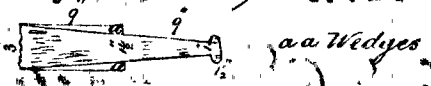
The roof to be Bengal terraced, with  
four courses of flat tiles laid in strong Chinam  
3 coats of plaster with teak rafters (22 x 8) supported  
on rafters placed 12 feet apart from Centre to Centre.

The scantlings of the eaves to timber

to be of those written on the Plan.

The end of the rafters projecting Painting  
on the west wall to be painted with two  
coats of Chocolate Color.

The rafters and joists inside to be coated  
with two coats of wood oil.

Teak wooden pegs will be built in the  
back wall, 6 feet from the ground, one foot  
apart. They will thus  as wedges.

The north end wall of the shed will  
be provided with a pair of Rail gates  $7 \times 4 \frac{1}{2}$ . They  
will be made of good sound and well seasoned  
teak wood, each half shutter will be  $3 \times 4 \frac{1}{2}$ . The  
frames and Cross bars  $4 \times 3$  properly mortised,  
diagonal bars  $3 \times 2$  palisading to be  $4 \frac{1}{2}$  from  
centre to centre.

The gates to be clamped at the corners  
with good wrought Iron clamps  $1 \frac{1}{2} \times \frac{1}{4}$  and fastened  
with  $1 \frac{1}{2}$  screw bolts.

The gate to be supported by a pair  
of strong hooks and hinges. The hooks to be  
fastened in stone  $15 \times 9 \times 9$  with lead and fixed  
in the walls as represented in elevation. The  
gate to be provided with a bolt and staple  
and pad lock.

All

All wood work to be coated  
with two coats of Chocolate Color paint,  
all iron work to be heated and while  
hot dipped in Coal tar.

All materials used and work done  
to be of the best description and subject  
to the approval of the Executive Engineer  
of Bangalore who shall have the  
entire power of ordering the removal  
of any work with which he is dissatisfied.

Exec. Eng. Office  
Bangalore  
18<sup>th</sup> November 1872

Henry W. Sibart. Captain R.E.

Executive Engineer Bangalore

Edwd Colonel. R.E.  
Inspecting Engineer for  
Civil & Military Buildings

Edwd  
Bangalore  
Jan 1/73

Military

Bangalore

Minor New Works

Abstract Estimate 1872-73.

Work. Constructing a New Cook House for the Serjeants' Mess  
European Infantry Barracks.

| Quantity     | Description of Work                                                                                                      | Rate | Per   | Amount    | Total   |
|--------------|--------------------------------------------------------------------------------------------------------------------------|------|-------|-----------|---------|
| 463 1/2      | Cft. of Excavation                                                                                                       | "    | "     | 2 1/2     | 1 3 4   |
| 778 3/4      | Cft. of Foundation and Basement<br>Stone in Chumane                                                                      | "    | 2 6   | Cft. 121  | 10 10   |
| 1269 1/8     | Cft. of Superstructure Brick in<br>Chumane                                                                               | "    | 2 7   | Cft. 218  | 4 4     |
| 86 1/8       | Cft. of Archwork                                                                                                         | "    | 1 1/2 | "         | 21 10 9 |
| 303 3/4      | Sqrs. of Terracing with Brick on<br>edge, 3" of Concrete, 3 Courses of<br>Flat tiles, and 3 Coats of Chu-<br>nam plaster | 27   | 8     | " Sqrs 83 | 9 6     |
| 82           | Rft. of Cornice work all round<br>with Brick in Chumane                                                                  | "    | 4     | " Rft. 20 | 8 "     |
| 12           | Rft. of Stone Steps 6" thick & 1 foot<br>in Breadth                                                                      | "    | 4     | " Rft. 3  | " "     |
| 3            | No. of Stone slabs for window sills<br>3" thick & 1 1/2 ft. in Breadth                                                   | "    | 12    | " C       | 2 4 "   |
| 21           | Rft. of Stone plate under fire place                                                                                     | "    | 6     | " Rft. 7  | 14 "    |
| 21           | Rft. of Fire place                                                                                                       | "    | 4     | " "       | 5 4 "   |
| 211 1/3      | Sqrs. of scraping out the old paint                                                                                      | "    | 4     | " Sqrs    | 8 6     |
| Carried Over |                                                                                                                          |      |       | 485       | 12 3    |

Specification to  
accompany Plan and  
Estimate for Constructing  
a Shed for the Fire Engine  
at the Main Guard Gate,  
European Infy's Barracks,  
Bangalore  
Estimate No. 510.  
1872-73.

1872-73

Specification to  
accompany Plan and  
Estimate for Constructing  
a Shed for the Fire Engine  
at the Main Guard Gate,  
European Infy's Barracks,  
Bangalore  
Estimate No. 510.  
1872-73.

Encls. 4 in a letter  
No. 62 of 24 July 1873  
to Secy. to Govt. O. N. D.

J. W. 5/11/73

Abstract Estimate for  
building a new Cook House  
for the Serjeants Mess Eu-  
ropean Infantry Barracks.  
Bangalore.

Estimate Rs 630

Military.

Bangalore.

Minor New Work

Abstract of the foregoing Estimate of 1872-73.  
Work Constructing a Shed for the Fire Engine at the Main  
Guard Gate. European Inf. Barracks.

| Quantity | Description of work                                                                                                   | Rate | Per | Amount | Total |
|----------|-----------------------------------------------------------------------------------------------------------------------|------|-----|--------|-------|
| 137      | Cft of Excavation                                                                                                     | 2    | 6   | 21     | 66    |
| 137      | Do. of Foundation stone in Chunam                                                                                     | 2    | 6   | 21     | 66    |
| 524      | Do of Superstructure brick in Chunam                                                                                  | 2    | 9   | 90     | 1     |
| 54       | Do of Arch work — Do —                                                                                                | 4    | 2   | 13     | 8     |
| 9.48     | Sq. of Plastering with two Coats of Chunam                                                                            | 2    | 8   | 19     | 23    |
| 5.08     | Do of Whitewashing — Do —                                                                                             | 3    | 2   | 15     | 3     |
| 4.40     | Do of Chuewashing — Do —                                                                                              | 4    | 2   | 1      | 1     |
| 55.3.8   | Cft of Teak wood wrought & put up                                                                                     | 8    | 8   | 19     | 3     |
| 32       | No of Nails 8" long                                                                                                   | 8    | 8   | 1      | 5     |
| 3.60     | Sq. of Bangal roof with 4 Courses of flat tiles in strong Chunam and 2 Coats of Plastering with teak peepers rails &c | 19   | 2   | 19     | 6     |
| 1        | No of Teak wood bailed gate 7x4 1/2 with painting complete                                                            | 50   | 2   | 50     | 2     |
| 40       | Cft of Stone slabs for Engine to stand on (12 x 4 1/2)                                                                | 2    | 6   | 19     | 6     |
| 1.98     | Sq. of flooring with 3 of granite stone pebbles and 1 1/2 latite gravel                                               | 1    | 8   | 2      | 15    |

Carried Over 473 8 10

Quantity Description of work Rate per Amount Total

|      |                               |   |           |                      |  |
|------|-------------------------------|---|-----------|----------------------|--|
|      |                               |   |           | Draught Car 473 8 10 |  |
| 3.31 | Spr. of wood oiling two Coats | 2 | 54 6 9 11 |                      |  |
| 39   | Do of Painting with Chocolate |   |           |                      |  |
|      | Colour                        |   |           | 1 15 2               |  |
|      |                               |   |           | 482-1-11             |  |
|      |                               |   |           | 27-14 1              |  |
|      | Total Estimate Rupees         |   |           | 510                  |  |

Engr. Office  
Bangalore  
16th November 72

Harford West - Captain  
Resident Engineer Bangalore  
Major Munro  
Major Munro

Ed Ford Colonel  
Inspecting Engineer for  
Civil & Military Buildings

W. Ford  
January 1873

No. 62 Office of the Inspecting Engineer for  
Civil and Military Buildings.  
Chepank 24 January 1873.

From Colonel C. A. Ford M.E.  
Inspecting Engineer for  
Civil and Military Buildings.

To Colonel G. W. Walker M.E.  
Secretary to Government.  
D. H. Department.

Enclosures  
2 Plans  
2 Abstracts  
2 Specifications

I have the honor to submit for  
the sanction of Government Plans, Estimates  
and Specifications for the Hindustani  
works; and to state that they have  
met with the approval of His  
Excellency, the Commander-in-  
Chief.

1 Estimate for constructing a shed  
for the Fire Engine at the main  
Guard Gate, European Infantry  
Barracks at Bangalore - Rs 510  
2 Estimate for constructing a  
new Cook House to the  
Sergeants Mess at - do - - - 630  
Total Rupees - 1140

2 The Fire Engine Shed is  
much

much required, as at present the  
Engine has to be kept in the verandah  
of the Military cells, some distance  
away from the main Guard Room,  
and the Military Authorities wish  
to have it placed next to the  
Guard Room.

3 The Serjeant's Mess Cook  
House of the European Infantry  
Barracks is in a very bad state, the  
walls and floor being undermined  
with Bandy coat holes. The  
construction of a new one is considered  
absolutely necessary.

I have the honor to be  
Sir,  
Your most obedient Servant.

Edwrd. Gordon M.  
Supt. Engineer for Civil and  
Mily. Bndg.



C/2511 ★ 116

Gobt. of 1873 Madras.  
PUBLIC WORKS.

To The District Engineer  
Bangalore

Date:

Encl.

Recd.

G. O. 5 Feb 1873

No. 44 878

Returns, amounting

Rs Rs. 1140, for constructing a shed for the fire engine at the main front gate, European Infanterie barracks at Bangalore and for a new cook house for the servants