

(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.	3477	Press	<i>Original</i>
B.P. No.		Mis.	
Dated	7. 12.	195	18/5

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
7th December 1875.*

Read the following letters :—

No. 128. From Major H. M. VIBART, R.E., District Engineer, Bangalore, to Major-General G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Bangalore, 19th July 1875, No. 59.

With reference to G.O., No. 151, dated 15th June 1875, I have the honor to forward herewith for sanction an estimate of Rupees 3,320, with plan and specification, for constructing an additional room to Serjeants' Mess, head-quarters of a Brigade and one Battery Royal Horse Artillery of the Ulsoor Barrack at Bangalore.

2. The plan and estimate have been approved of both by the Officer Commanding the Division and His Excellency the Commander-in-Chief.

No. 129. From Major H. M. VIBART, R.E., District Engineer, Bangalore, to Major A. DE C. SCOTT, R.E., Under Secretary to Government, Public Works Department, dated Bangalore, 11th October 1875, No. 113.

With reference to your Memorandum, No. 618, dated 6th October 1875, I have the honor to inform you that the set of buildings is complete, and that the estimate alluded to is for an additional room to the Serjeants' Mess. It is in fact an improvement to a set of buildings long since complete.

No. 130. From the same Officer, dated Bangalore, 29th November 1875, No. 147.

With reference to Memorandum No. 625, dated 30th October 1875, I have the honor to report that the accommodation in the Serjeants' Mess, Royal Horse Artillery at Bangalore, is greatly inferior to that of the Serjeants' Mess both in the Cavalry and Infantry.

2. The Infantry with 47 Serjeants have rooms containing 3,192 square feet.

3. The Cavalry with 41 Serjeants have rooms containing 2,859 square feet, while the Royal Horse Artillery with 17 Serjeants have rooms containing only 680 square feet.

4. To bring the Royal Horse Artillery Mess-room accommodation up to that of the Cavalry it would be necessary to give them an addition of 506 square feet, and this would be effected by the addition of the proposed room, 17 x 30 feet. The Cavalry at present have 69 square feet per man, the Infantry 68 per man, while the Royal Horse Artillery have only 40 square feet per man. With the proposed additional room the Royal Horse Artillery would have 70 feet per man.

No. 131. ORDER THEREON, 7th December 1875, No. 3,477.

MILITARY WORKS, No. 2.

The estimate amounting to Rupees 3,320 is sanctioned. Provision will, if practicable, be made for the work from the Reserve of the ensuing year.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

To the District Engineer, Bangalore.
" Controller of Public Works Accounts.
" Military Department.
Ed. S. T. Austin.
Spare Copies

List of Indian Cavalry 30 July 1866 2261
 " " " " 11 Feb. 65 " 11
 " " " " 27 Feb. 66 " 14
 " " " " 3 Feb. 67 " 2
 " " " " 23 May 68 " 46
 " " " " 124 " 12 Oct. 68
 " " " " 360 " 5 Feb. 69
 " " " " 1972 " 22 Jan. 60

Bangalore.
 11 Oct 1895 No. 113

Memo 30 Oct 1895

The D.C. Bangalore should report with reference to the Circulars of the Govt of India Manually which or any others which have been issued for guidance in the construction of Mess Buildings whether the accommodation already provided for the servants of the Royal Artillery at the Wilson Barracks is less than in his opinion is required by the letter in spirit of such Circulars & whether he is of opinion that the room for mess and recreation now available

In the Artillery Sergeant
is inferior to that given
to the Sergeant of the
Cavalry in the new Manual
~~of the~~ ^{of the} appor-
taking into due con-
sideration the number
in each case

Gordon

Chadwick

Minor 12 625

No. 1.—ESTIMATE PARTICULARS.

Main Budget Head to which chargeable.

Imperial

Purpose of work as given by District Engineer. ^{Additional room to}
Sergeant's Mess R. H. A.
Bangalore.

Original sanction for the preparation of the
detailed estimate. Date and number sanction-
ing and Public Works Department. ^{1444 Dept.}
No. 2498 of 24-5-75 & 11
No. 159 of 15-6-75.

Amount of present estimate and its district
number. Rs 3320. No. 57 of
1875-76.

Budget head to which chargeable if sanc-
tioned (in detail.)

Military

Provision has been made in the Budget of
in anticipation.

(Specimen No.)

Funds can be made available during the
current year.

(Yes or No, and state how in former case.)

No. 3715 was at the dis-
posal of Govt. on the
21st 10th/1875.
Brought forward as urgent.

(Yes or No; and if former, state by whom.)

Not Stated

Number on last revised list of works ap-
proved and brought forward in due order of
precedence.

Not entered

No. Yes No.

DOCUMENTS IN FILE

From District Engineer—*Bangalore*

1 Covering letter No. 89, date 19-7-75

1 Letter from Range Officer, No. —, date —

1 Detailed Estimate.

1 Abstract do.

1 Plan.

1 Specification Report.

From Office—

Original sanction, No. 2498 date 26-5-75
for detailed estimate preparation.

1 No. 181 of 15-6-75

Orders and Proceedings.	No.	Date.	Under P. W. D. G. O.
P. W. Department	...		No. Date.
Public do.	...		
Revenue do.	...		
Financial do.	...		
Military do.	2498 24/5/75	15-6-75	

Memorandum.

The Chief Engineer observes that the letter from the District Engineer, Bangalore, No. 113 d/11 Oct/75 is not an exact reply to Memo No. 618 d/6 October/75. The District Engineer was asked to report whether the work estimated for forms a portion of a set of buildings exceeding in cost 2 lacs of rupees— But no information on this point has been afforded. This should now be supplied with particulars of sanction.

Chief Engineer.

District Engineer,
Bangalore.

In a Brigade of Royal Horse
Artillery there are 5 Sergeants -

In a Battery there are 8 Sergeants -

In a Regiment of Cavalry there
are 35 Sergeants

In a Regiment of Infantry there
are 50 Sergeants -

The undersigned has carefully looked
over his file of Standards Plans but
cannot find a design for a Map
House for the Sergeants of a Brigade
of Royal Artillery and he does not
think that there is a separate design
for that section of the army.

	<u>Artillery</u>	<u>Cr. P.</u>
	Horse Battery - 5 Sergeants	5
	Foot Battery - 8 Sergeants	8
		12
	Cavalry -	35

See for maps for Artillery Sergeants in
Regimental Index.

State of Deviations
On plan and Estimate for an additional room
to Syriacs Mess at Bangalore

The rates deviate
from the District Schedule
in the following items.

Foundations Stone in
Chennai in Excess -

Basement - do - do - in Excess -

Stone flooring with a
bedding course of concrete
is less than Schedule rate.

The plan furnished
is very different from
the Standard design
sanctioned in G.O. dated
26th October 1866 No 3426.
and there is a great
deal more accommodation
in the Standard design than

2.51.18
15
1/45

in the plan submitted
by District Engineer

The dimensions

of the standard plan

$$\text{are } 50 \times 24 = 1200$$

$$\text{and } 30 \times 24 = 720$$

$$\text{Total area } 1920$$

The dimensions

of 2d plan

$$35 \times 17 = 595$$

$$30 \times 17 = 510$$

$$\text{Total area } 1105$$

Difference 815

Left just left in
District plan

C.M.R.

Comparative Statement showing difference in Rates between
the Estimate submitted by the District Engineer and the
District Schedule for constructing an additional room to the
Sergeants Mess, H^d Qr of a Brigade, R. H. A. Udon Benach. Bangor

Description of Work.	Rate as per Estimate submitted by the District Engr.	Difference.	Remarks.
Excavation	Cft. " 1		
Foundation Stone in Chumam	do. " 3	" " 1	
Basement	do. do. " 3	" " 1	
Superstructure Bricks in	do. do. " 33	" " "	
Bond Stones (3x4x1 1/2)	Each 1	" " "	
Archwork Bricks in Chumam	Cft. " 49	" " "	
Ornament	do. Rft. " 12	" " "	
Steps	do. " 4	" " "	
Columns 1 1/2 ft. diam. & 8 ft high with Plastering	Each 11	" " "	
Plastering with 2 Coats Chumam	Sq. 28	" " "	
White washing	do. do. " 2	" " "	
Blue washing	do. do. " 3	" " "	
Ironwork wrought & put up	Cft. 38	" " "	
Nails 6" long	Each " 6	" " "	
do 7" do	do. " 7	" " "	
Stone Slabs under Susses	do. " 4	" " "	
Roofing with Teak, reapers nails flat & pane tiles & Chumam borders	Sq. 22	" " "	
Bengal Cementing with Teak reapers nails four courses of flat tiles & 3 coats of plastering	do. 22	" " "	
Susses complete 17 ft	Each 39	" " "	
Filling in basement	Cft. " 3	" " "	
Stone flooring	Sq. 128 1/2	" " "	
Levelling Course of Concrete under stone floor	do. 5	" " 28	
Wood Oiling - 2 Coats	do. 2	" " "	

Doors & panelled & Venetian
 with frames & iron
 fittings complete each 42
 in the door panelled with frames
 & iron fittings do do 40
 by 16 Windows, Venetian shutters
 outside & glazed do
 inside with frames &
 iron fittings complete do 32
 Ventilating glazed living
 windows with frames
 4x1 1/2 do 9
 Painting with 2 coats of
 Chocolate color 5
 Dismantling Brickwork 3
 Lintel stone for new door
 way to be opened
 in the present wall
 6x12x3 Each 28

Govt. Letter Department
 Fort St George
 Madras. September 1875

No 618.
 Memo.

Adverting to his letter
 No 69 of 19th July 1875, the
 D. E. Bangalore is requested to
 report whether the additional
 rooms to Sergt. Albert, R.N.A.
 Barracks, then in
 referred to, forms a portion
 of a set of buildings exceeding
 in cost 2 lakhs of Rupees, &
 still incomplete, as under
 these circumstances the
 Estimate will require the sanction
 of Government of India.

By order
 1875
 1st Oct 1875
 Under Secy to Govt. of
 Madras

Doors $\frac{1}{2}$ panelled & $\frac{1}{2}$ Venetian
 with frames & iron
 fittings complete 4x8 Each 42 " " " "
 Door panelled with frames
 & iron fittings do do 40 " " " "
 Windows, 6e
 outside
 inside w
 iron fit
 Ventilating
 Windows
 4e 42
 Painting in
 Chocula
 Dismantle
 Linoleum
 way to
 in the,

Memo No 618
 17.6.10 75

Govt. Little
 Fort St
 Madras

J.P.

Estimate of the probable

C. No. 4694

The Artillery Dept
 Mess at Bangalore
 does not appear to
 form a portion of
 the "Agram Sanat
 scheme" as it is
 not included in the
 list of buildings
 herewith sent.

Please return list.
 24/8/78 J.P.

The papers submitted
 apply to the Agram Sanat
 Scheme.

Doors & panelled & Venetian
 with frames & iron
 fittings complete 4x8 Each 42 " " " "
 Door panelled with frames
 & iron fittings do do 40 " " " "

Windows, 6
 Outside
 inside 6
 iron fit
 Ventilating &
 Windows
 4x8 43
 Painting in
 Choccol
 Dismantle
 Linoleum
 way to
 in the

Gov. Little
 Foksh
 Madras

The information
 has not
 been supplied

Must not this go up
 for sanction of the
 Govt of India, as
 portion of a set
 of H&S exceeding in
 cost Lakh, &
 still incomplete?
 Has not been
 made of the work
 in the Schedule of
 1886-87?

D. J. P.
 + P.

Doors & panelled & Venetian
 with frames & iron
 fittings complete 478 Each 42 " " "
 Door panelled with frames
 & iron fittings do do 40 " " "
 Windows, 0
 outside
 inside &
 iron for
 Ventilating
 Windows
 4
 Paintings in
 Chocul
 Dismantle
 Linoleum
 away &
 in the

Gov. Little
 Fok ed
 Madia.

P.

Estimate of the probable
 cost of the building and additional amounts to be paid
 for the same

1866-74

The books of the
 Office have been looked
 into up to 1860 and it
 cannot be ascertained
 when the Artillery Bar-
 racks at Ussor was
 sanctioned or whether
 it belongs to a system
 of works exceeding two
 lakhs. Inquiries and
 search have been made
 in the Military Dept
 and in the Lt. Col. Genl's
 Office, but nothing
 could be found relating
 to the Barracks ex-
 cepting such additions
 &c as that submitted
 with the District Engineer
 at the

Estimate of the probable
cost of constructing additional rooms to Fifth
Mess on the Victoria Barracks at Bangalore.
Widened by Quarter Master General Mysore Dist.
No 67 date 6th March 1875.

Observations

End wall of D^o 15 1/2 3 4 186

Grout, near walls of Verandah. $24\frac{1}{4}$ to $25\frac{1}{2}$ 417 $\frac{1}{2}$

End. val. of _____ 135222 1772

Steps _____ 2822. 184

Total of Excavations 1589

To the C^o of Foundation stone in Chancery 1589

Basement

End wall _____ 1 10 4/2 1 1/2 54 2/8

Front near wall of Venezuela 2.4 1/2 2 1/2 249

End wall of 100 136 2 1/2 108

Back to shells 28 3/4 24

Total cft of Basement stone in Chumam 651

Lubers tracture

Byrd wall 1 17 13 17 485 2

1	17 1/2	3	76 1/2
---	--------	---	--------

Total 2116 1/2

Deduction

Doors	2	4 1/2	1 1/2	8 1/2	114 3/4
Windows	6	3 1/2	1 1/2	5 1/2	173 1/4
Ventilating Swing windows	8	4	1 1/2	1 1/2	72
Arch work					16 1/4
<u>Total Deduction</u>					52 1/4

Total cft of Superstructure brick in

Bond stones	1 1/2	3	4		12
-------------	-------	---	---	--	----

Arch work

Doors	2	6	1 1/2	1 1/4	22 1/2
Windows	6	5	1 1/2	1 1/4	56 1/4
Ventilating Swing windows	8	5 1/2	1 1/2	1 1/4	82 1/2
<u>Total cft of arch work</u>					161 1/4

Pft of Cornice work					90
Steps					32

Columns 1 1/2 ft diameter and 8 ft high with plastering &c complete

	11				11
--	----	--	--	--	----

Plastering inside

Additional room	24	17			1598
Gable	2	17	8		102
Jambes & soffits of New doorway in the present wall	1	20	3		60
Jambes & soffits of doorway	2	2 1/2	1 1/2		64 1/2

brought over 1824 1/2

Brought over 1824 1/2

Jambes & soffits of window way	6	18	1 1/2		162
Ventilating Swing Windows	8	4	1 1/2		132
<u>Total</u>					2118 1/2

Deduction

Doors	2	4 1/2	8		72
Windows	6	3 1/2	5 1/2		115 1/2
Ventilating Swing windows	8	4	1 1/2		48
<u>Total Deduction</u>					235 1/2

Total Plastering inside 1883

Plastering outside

Front & rear wall	2	33	16		1056
End wall with gable	1	20	19		380
Basement front & rear	2	42	1 1/2		126
No end	1	40	1 1/2		60
<u>Total</u>					1622

Deduction

Doors	2	4 1/2	8 1/2		76 1/2
Windows	6	3 1/2	5 1/2		115 1/2
Ventilating Swing windows	8	4	1 1/2		48
<u>Total Deduction</u>					240

Total plastering outside 1382

Total Sq. of plastering with two coats of chunam 3266

No. White washing two coats					18.83
No. Blue washing two coats					13.82

Wood work

Particulars of work Measure
No. L B D Contents Total

Woodwork

Parlour ridge pole	5	32 $\frac{1}{2}$	4 $\frac{3}{4}$	37-6-3 $\frac{3}{8}$
Brackets	4	3 $\frac{1}{4}$	5 $\frac{1}{2}$ 4 $\frac{3}{4}$	4-1 $\frac{7}{8}$
Rafter 1 $\frac{1}{2}$ ft apart	42	10	2 $\frac{1}{2}$ 5 $\frac{1}{2}$	30-7-6
Press runners to verandah				
front and rear	2	43 $\frac{1}{4}$	5 $\frac{1}{2}$ 7 $\frac{1}{2}$	24-9-4
Do do end	1	40 $\frac{1}{2}$	5 $\frac{1}{2}$ 7 $\frac{1}{2}$	11-7-2 $\frac{5}{8}$
Step rafter to verandah	2	17	4 $\frac{1}{2}$ 6 $\frac{1}{2}$	6-10-10
Rafter to do	58	12 $\frac{3}{4}$	3 5	77-0-4
Jack rafters do	24	8	3 5	20-0-0
Wall plates do	2	32	4 2	3-6-8
do do	1	20	4 2	1-1-4

Total cft of teak wood wrought and

put up 213-5-7 $\frac{3}{8}$

Nails 6" long	138	0	0	138 138
do 7" long	168	0	0	168 168
Show slabs under trusses	4	1 $\frac{1}{2}$	1 $\frac{1}{2}$	4 4

Roofing

Main building 2 34 13 $\frac{1}{2}$ 918

Total Sq of Roofing with teak rafters
nails, flat and pan tiles and
chunam borders 918

Bengal terrace

Front & rear verandah 2 44 $\frac{1}{4}$ 12 1062

End verandah 1 20 12 240

Total Sq of Bengal terracing
with teak rafters, nails, four courses
of flat tiles & 3 coats of plastering 1302

Particulars of work Measure
No. L B D Contents Total

For one truss

Woodwork

Principal rafters	2	11	3 $\frac{1}{2}$ 4 $\frac{3}{4}$	6-5 $\frac{3}{4}$
Tie beams	1	19	3 $\frac{1}{2}$ 5 2	3-8 $\frac{1}{2}$
King posts	1	6 $\frac{1}{2}$	3 $\frac{1}{2}$ 3	0-5-8
Struts	2	5 $\frac{1}{4}$	3 $\frac{1}{2}$ 3	0-9-2

Total cft of teak wood wrought and
put up 6-1-0 $\frac{1}{4}$

Wrought Iron

Stirrups at lower ends of principal rafters 4 by 2 $\frac{1}{4}$	2	668	0	1336
do at foot of king posts 2 $\frac{1}{2}$ by 2 $\frac{1}{4}$	1	407	0	407
do at top of do 6 by 2 $\frac{1}{4}$	2	668	0	1336
do do struts 3 by 2 $\frac{1}{4}$	2	501	2	2004

Bolts $\frac{1}{2}$ dia & 5 long with
heads & nuts 14 50 0 700

Total lbs of Wrought Iron 5783

Filling

Main room	1	29 $\frac{1}{2}$	16 $\frac{1}{4}$ 1 $\frac{1}{2}$	719 $\frac{1}{16}$
Front & rear verandah	2	39 $\frac{1}{4}$	7 $\frac{3}{8}$ 1 $\frac{1}{2}$	868 $\frac{13}{32}$
End verandah	1	20 $\frac{3}{4}$	7 $\frac{3}{8}$ 1 $\frac{1}{2}$	229 $\frac{35}{64}$
Total cft of Filling in basement				1817 $\frac{61}{64}$

Stone flooring

Main room	1	29 $\frac{1}{2}$	16 $\frac{1}{4}$	479 $\frac{3}{8}$
Front & rear verandah	2	39 $\frac{1}{4}$	7 $\frac{3}{8}$	578 $\frac{15}{16}$
End verandah	1	20 $\frac{3}{4}$	7 $\frac{3}{8}$	153 $\frac{3}{8}$
Total Sq of stone flooring				1211 $\frac{11}{32}$
do Levelling course of concrete under stone floor				1211 $\frac{11}{32}$

Particulars of work Measure
No. Sq. Ft. Contents Total

Wood Ceiling

Six beams	2	17	1 1/8	38 1/4
Principal rafters	4	10	1 1/2	43 3/4
King posts	2	6	1 1/2	13
Struts	4	5	1 1/2	21 3/4
Purlins & ridge pole	3	30	1 1/8	123 3/4
Brackets	4	3/4		3
Rafters	12	11	1 1/2	36 5/4
Breastsummers to veranda	120		1 1/4	205
Wip rafters to veranda	2	16	1 1/4	46 2/3
Rafters to veranda	58	12	1 1/2	754
Jack rafters	24	7 1/2	1 1/2	195
Glazed shutters to window	6	3	5	90
Door	1	4 1/2	2 8 1/2	76 1/2

Total Sq. of wood Ceiling two coats 1975 1/2

Pairs of 2 pannels and 2 venetian
doors with frames and iron fittings

Complete 4 x 8 2 . . . 2 2

inside measurement

Pairs of pannelled door with
frames and iron fittings Com-

plete 4 x 8 inside measurement 1 . . . 1 1

Pairs of windows Venetian shutters
outside & glazed shutters inside
with frames & iron fittings complete

3 x 5 inside measurement 6 . . . 6 6

Ventilating glazed swing

Windows with frames 4 x 1 1/2 8 . . . 8 8

Painting

Particulars of work Measure
No. Sq. Ft. Contents Total

Painting

Doors 2 4 1/2 2 8 1/2 191 1/4

Windows 6 3 1/2 3 5 1/2 346 1/2

Ventilating glazed swing

Windows 8 4 . 2 64

Total Sq. of Painting with two coats

of chocolate color 601 3/4

Dismantling

Doorway to the open air

the present wall 1 4 1/2 1 8 1/2 57 3/8

Total cft. of dismantling work 57 3/8

Lintel stone for new doorway 1 6 1/2 6 1 1

Self

Specification to accompany
Plan and Estimate for Constructing
additional room to ^{Head Quarters} ^{Regt of Horse Artillery} Mess
on the ^{Regt of Horse Artillery} ^{Regt of Horse Artillery} Barracks at Bangalore.

Amount of Estimate Rs 3320.

The excavation for foundation to be taken down to such depth as the District Engineer may consider necessary and the bottom taken out perfectly level.

The foundation to be laid with stone in. Chunar stones laid closely fitted with good bond and well flushed up with Chunar. Every sixth stone at least to be a through header.

The basement to be similarly laid with outer joints scraped out and pointed.

The Superstructure to be of best bricks $9 \times 4\frac{1}{2} \times 2\frac{1}{2}$ in. Chunar. The bricks to be soaked in water before being used and English bond to be observed throughout. The old and new bricks works to be well bonded together by bond stones 3 feet in length.

The arches to be neatly turned and only selected hard bricks used. The joints all to radiate correctly according

according to the nature of arch. Bricks to be ground down to required shape and the Key bricks to be well driven home joints not to exceed $\frac{1}{2}$ inch thick and to be scraped out before plastered.

The description of the cornice should be of the pattern supplied by the District Engineer Cornice bricks to have proper bearing not less than 4 inches and set with strong lime.

Stone slabs for steps to be of one stone of the required dimensions according to the nature and size of the step having outer sides and edges dressed.

The exposed part of the masonry will be plastered with two coats of chunam.

The interior of the building will be whitewashed with two coats and the exterior will be blue washed so as to correspond with the remainder of the building.

The whole of the timber will be of well seasoned and round trees free from all shakes and knots and neatly finished off.

The roof of the main room

room to be put supported on trusses 10 feet apart as shown on the plan each truss to bear on stone slab $12 \times 12 \times 4$. The common rafters to be 12 feet apart and to be well secured with proper nails.

The whole to be nailed with teak peepers $2 \frac{1}{2} \times \frac{3}{4}$ and to be covered with flat and pan tiles with chunam borders. The verandah to be bengal terraced with four courses of flat tiles laid in chunam and 3 coats of plastering with teak peepers supported on rafters placed 12 ft apart from centre to centre resting on cross members placed over the columns as shown on the plan.

The various parts of the trusses to be fixed together to the joints by means of Iron clamps $2 \times \frac{1}{4}$ bolts $\frac{1}{2}$ or with screw heads and nuts.

The basement to be filled in with earth well watered and rammed till thoroughly consolidated over this a flooring of stone slabs having a smooth surface not less than 4 inches thick with the edges dressed square to be laid on a layer of concrete 5 in thickness joints scraped

scraped out and pointed with strong lime.

Three pairs of doors 4×8 (inside measurement) two of which being half pannelled and $6 \frac{1}{2}$ venetian and the other one pannelled with frames $4 \frac{1}{2} \times 3 \frac{1}{2}$ door plank $1 \frac{1}{4}$ thick with strong hinges, bolts, locks &c are to be fixed in the position as shown on the plan.

Six pairs of windows with glazed shutters inside and venetian shutters outside 3×5 (inside measurement) with frames 4×3 venetian plank $\frac{1}{2}$ thick venetian bar $1 \times \frac{1}{4}$ with 4 brass plate hinges, hooks eyes and rings &c will be provided.

Eight glazed ventilating swinging windows $4 \times \frac{1}{2}$ frames 4×3 and other fittings complete will be fixed to the main room.

The wood work of the roof and inside doors to be coated with two coats of wood oil.

The doors, windows and ventilating swinging windows are to be painted with two coats of Cassin's anti corrosive paint chocolate color.

Tell
District Engineer
Bangalore
8th July 1875

A. Curjel Vibant. Major P. &
District Engineer Bangalore

No.

DISTRICT ENGINEER'S OFFICE.

Bangalore 19th July 1875

From

The District Engineer,

Bangalore.

To.

The Chief Engineer

Public Works Department.

Madras

SIR,

With reference to G. O. No. 151
dated 15th June/75 I have the honor
to forward herewith for sanction
an Estimate of ^{with Plan and Specification} Rs. 3320⁰ for Construct-
ing an additional Room to Serpents
Mess No. 2 of a Brigade and one
Battery R. A. A. of the Ussor Barrack
at Bangalore.

The Plan and Estimate have
been approved of both of by the Officer
Commanding the Division and His
Excellency the Commander-in-Chief

I have the honor to be
Sir

Your most obed^t servant

Per *Robert* Major R.E.
District Eng^r Bangalore

From

The District Engineer
Bangalore

To

The Chief Engineer
Madras

Dated 19th July 1875
Per *W. H. H. H.*

Estimate and Specification

for Constructing an
additional Room to the
Serpents Mess Headquarters
of a Brigade and one
Battery Royal Horse
Artillery Ussor Barrack
at Bangalore.

Amounting to Rs. 3320⁰—

See page 57/4

1875 July 1

was always
the Abingtonian

10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532

Dear Mr. May,

I am very glad to hear of your
 success in the study of the
 Greek language. I am sure you
 will find it very profitable.

Yours truly,
 Wm. May

Case: 10-53

Stewart for another
an estimate of \$33.25
with 2 months deferral
for no contribution
on additional down

to the 10th of Dec. 1871
Bureau and Northern
of the 10th of Dec. 1871
to the 10th of Dec. 1871

Exp 2-12-78
 Nov 12-10-78
 8 Sept 20-9-78
 10 Sept 20-9-78

P. W 1875-76
From No 7633

The District Engineer
Bangalore

To The Under Secy.
to Govt. D. H. S.

Madras.
D of 29 November
P. W. 30th " 1875.
No 147.

Reporting that
the accommodation
required for Sergeants
Mess R. H. S. as
it is inferior to
Cavalry & Infantry
Sergeants' Messes. -
G.O. No 3477. 7-12-75

N/130

En 2-12-75

N/13

District Engineer's Office
Bangalore 11 October 1875

From

The District Engineer
Bangalore.

To

The Under Secretary to Government
P. W. Department

Sir

With reference to your Memo
No. 618 dated 6 October 1875, I have
the honor to inform you that the set
of buildings is complete, and that
the estimate alluded to, is for an
additional room to the Sergeant's
Mess. It is in fact an improve-
ment to a set of buildings long
since complete.

I have the honor to be
Sir

Your Most Obedt Servant
Herbert Robert Major R. H.

District Engineer

Proceedings of the Madras Govt.
under date the 7 Decr 1875

Letters from the District Eng. Bangalore. Read the following

(H. E. No 59	d/ 19 th July 75)
" 113	" 11 th Oct ^r 75)
" 117	" 29 th Nov ^r 75)

The estimate amounting to Rs. 3320 is sanctioned. Provision will, if practicable, be made for the work ^{from} in the ^{Revenue} budget of the ensuing year.

Amel

District Sug. Bangalore. _____
 Controller P. W. Accounts. _____
 Military Department. _____

with me H. E. E. E.
 15

Archduke 11-12-75

R. W. 1895
March No: 646
The West Virginia
Legislature

The water except
to look what
water is below
Dec 12. —
From 10.30 to 11.30
the following
the the water
at the station
11.30 to 12.30
to from a distance
room to the right
Dec 12.

Q-12-75
M-12-75

80. 96 54 77. 7. 12. 75.

Apr 173 No 145-146.
8029 Jan 2/5 at 537 6582
" 18 June " " 157 1110:
Memo. No 6188 6-002/15
" 625 " 30: " "

1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800

125-131

602-12-75

THE UNIVERSITY OF CHICAGO

J. E. Baggeton

111

100

1000

U. S. Geol. Surv. No. 3477

[illegible]

Additional Room to be
- present Messrs. R. H. & Wm.
- Wm. - The Estimate of
Rs 3250 for construction and
- sanctioned - Provision
to be made from the Reserve
of the ensuing year.