

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referee _____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1123 (W) Press
Ms.

Dated 19-10-1877.

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

19th October 1877, No. 1,123 W.

Buildings and Roads.
Military Works.

Read the following papers:—

No. 192. From Major H. M. VIBART, R.E. District Engineer, Bangalore, to the Chief Engineer, Public Works Department, Buildings and Roads, dated Bangalore, 23rd July 1877, No. 95.

With reference to G.O., No. 82, dated 11th August 1876, I have the honor to forward herewith, for the sanction of Government, detailed plan and estimate, amounting to Rupees 11,700, for constructing a School-house for the whole of the Artillery Force at this station.

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

3. His Excellency remarks that the work may be executed when funds are available.

No. 192-A. From the District Engineer, Bangalore, dated 4th October 1877, No. 133.

No. 193. ORDER THEREON, 19th October 1877, No. 1,123 W.

HIS GRACE the Governor-in-Council sanctions the plan and estimate of Rupees 11,700 for a School-house for the whole of the Artillery Force at Bangalore.

2. The work will, if possible, be entered in the Budget of 1878-79.

3. This sanction has been registered as Imperial No. 72 B of 1877-78.

(True Extract.)

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

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

Exd. F. C. Shunker.
Spare Copies

No 28858/26 Sept 1877

Memorandum.

The District Engineer Bangalore
is requested to be so good as to supply this
office as early as possible with the number
and date of G.O. sanctioning the Standard
Plan of a School house for the Artillery, as
noted in Plan and Specification submitted
with his letter No. 95 dated 23^d July 1877

Sd/ W. Farwell Colonel
Dy: Chief Engineer PWD

To
The District Engr: Bangalore

Head of Service Imperial
 Fund Ordinary
 Class Original work
 Main Head Military
 Sub Head Military building accommodation for
 P. H. A. and P. Artillery

To be carried out by the P. H. A.

Detail Estimate No. of 1876/77

District Bangalore

Name of work Constructing a School House for
 whole of the Artillery Force at Bangalore vide
 Asstt. Dir. Mr. G. M. D. No. 1953/3rd May 1876.

Particulars of work No. ^{Measurement} ^{Contents} ^{Detail}
 L B D

Excavation

Front & rear walls of main building	2	81½	3½	4	2282
End and cross walls to do	3	18	3½	4	756
Columns to verandah	22	3½	3½	4	1078
do at corner do	4	6½	3½	4	364
Retaining walls between columns	14	7½	3	2¼	722½
do do	8	6½	3	2¼	351
do do	4	7½	3	2¼	196¾
Front and rear steps	3	14½	2½	1	106¼
do do	1	16½	3½	1	56½

Total Exp^{ts} of
 Excavations } 5911¾

Particulars of work ^{measurements} _{Q₂} ^{Contents} _{Total}
 L B D

Concrete

Front and rear walls of main building	2	81½	3½	1	570½
End and cross walls of do.	3	18	3½	1	189
Columns to verandah	22	3½	3½	1	269½
do. Corner do.	4	6½	3½	1	91
Retaining walls between columns	14	8¾	3	¾	272¼
do. do. do.	8	7½	3	¾	135
do. do. do.	4	8¼	3¾	¾	74¼

Total Cft. of Concrete 1601½

Foundations

Front and rear walls of main building	2	80½	2½	3	1207½
End and cross walls of do.	3	19	2½	3	427½
Columns in verandah	22	2½	2½	3	412½
do. Corner do.	4	5½	2½	3	165
Retaining walls between columns	14	8¾	2	1½	363
do. do. do.	8	7½	2	1½	180
do. do. do.	4	8¼	2	1½	99
Front and rear steps	3	14¾	3	1	127¾
do. do. do.	1	16¾	4	1	64¾

Total Cft. of Foundations
 Stones in chunams 3046½

Particulars of work ^{measurements} _{Q₂} ^{Contents} _{Total}
 L B D

Basement

Front and rear walls of main building	2	80	2	2.58	830 $\frac{14}{25}$
End and cross walls to do.	3	19 $\frac{1}{2}$	2	2.58	301 $\frac{48}{50}$
Columns to verandah	22	2	2	2.58	227 $\frac{1}{2}$
do. Corner do.	4	5	2	2.58	103 $\frac{1}{3}$
Retaining wall between columns	14	9 $\frac{1}{4}$	1 $\frac{1}{2}$	2.58	495 $\frac{2}{25}$
do. do.	8	8	1 $\frac{1}{2}$	2.58	247 $\frac{17}{25}$
do. do.	4	8 $\frac{3}{4}$	1 $\frac{1}{2}$	2.58	135 $\frac{8}{20}$
Front and rear steps	3	11 $\frac{2}{14}$	2	3 $\frac{1}{4}$	52 $\frac{11}{28}$
do. do.	1	12 $\frac{7}{14}$	2 $\frac{1}{2}$	1	31 $\frac{17}{28}$

Total Cft. of Basement stones in chunams 2425½

Superstructure

Front and rear walls of main building	2	77½	1½	16	3816
End and cross walls of do.	3	20	1½	16½	451¼
Parapet walls over front & rear walls	2	77½	1½	1½	357¾
do. Over End and cross walls	3	20	1½	1½	135
Binding wall over beams	5	20	¾	1	75
Total					5885

Deduction

Doorways	8	4	1½	8	384
Windows	10	21	1½	6	360
Shelves	3	3½	¾	4½	35¾
Glazed ventilating swing windows	18	4	1½	1½	162
Arch work					399¾

Total Deduction 1340½

Total Cft. of Superstructure bricks in chunams 4494½

Particulars of work ^{measurement} No. L B D Contents Total

Archwork

Over Doorways 8 5½ 1½ 1¼ 82½

Windows 10 5½ 1½ 1¼ 103½

Shelves 3 5 1½ 1¼ 28½

Ventilating glazed swing windows 18 5½ 1½ 1¼ 185½

Total Cft. of Brickwork in chimney 399½

Cornice work

Front and rear 2 80½ " " 161

End walls 2 24 " " 48

Total Cft. of Cornice work 209

Steps

Front and rear steps	{	3 9¾ " " 28½
		3 13¾ " " 210½
		3 17¾ " " 52½
		1 9¾ " " 9¾
		1 13¾ " " 13¾
		1 17¾ " " 17¾
Do. Do.	{	1 21¾ " " 21¾

Total Cft. of stone slabs for steps 185½

Columns 1½ ft. diameter and 8 feet

high with circular brick chimneys including cornice plastering and white

washing complete 34 " " 34 34

Particulars of work ^{measurement} No. L B D Contents Total

Plastering inside

Around the adults room 1 106 " 16 1696

Do. Infants and growing girls room 1 124 " 16 1984

Parapet wall front of rear 2 75 " ½ 225

Do. top 2 79½ " ½ 238½

Do. Over end and cross walls 4 20 " ½ 120

Do. top 3 20 " ½ 90

Binding walls over beams 5 20 " 2¼ 275

Jamb and soffits of Doors 8 20 " ½ 240

Do. windows 10 20 " ½ 300

Do. Shelves 3 16 " ¾ 36

Do. Ventilating swing windows 18 11 " ½ 297

Total 550½

Deduction

Doorways 8 4 " 8 256

Windows 10 4 " 6 240

Ventilating windows 18 4 " ½ 108

Total Deduction 604

Total Plastering inside 4897½

Plastering outside

Front and rear walls of main building 2 79½ " 15 2385

End walls 2 23 " 15 690

Parapet wall Front and rear 2 79½ " ½ 238½

Do. ends Do. 2 23 " ½ 69

Basement front and rear 2 103 " 258 531½

Do. ends 2 46½ " 258 239½

Total 4158½

Particulars of work No. ^{measurement} L B D Contents Total

Bengal terracing

Front and rear verandahs 2 10 1/2 " 13 1/2 282 1/2

End verandahs 2 23 " 13 1/2 621

Total Sq. of Bengal terracing with four courses
of flat tiles 3 coats of plastering and tank
reapers 8 1/2 } 344 1/2

Stone plates under beams 10 " " 10 10

Wrought Iron spouts

Front and rear 14 7 " " 98

Total Rft. of wrought Iron spouts 98

Filling in basement

Adults room 1 32 1/2 19 1/2 2 1267 1/2

Infants and girls 1 41 1/2 19 1/2 2 1618 1/2

Front and rear verandahs 2 99 9 1/2 2 3762

Ends do 2 23 1/2 9 1/2 2 893

Space between pillars 14 9 7/8 1/2 2 128

do do 8 8 1/2 2 64

do do 4 8 3/4 1/2 2 35

Total Rft. of filling in basement with
earth } 7768

Flooring

Adults room 1 32 1/2 19 1/2 " 633 3/4

Infants and girls room 1 " 19 1/2 41 1/2 809 1/4

Front and rear verandahs 2 99 9 1/2 " 1881

Ends do 2 23 1/2 9 1/2 " 446 1/2

Carried Over 3770 1/2

Particulars of work No. ^{measurement} L B D Contents Total

Brought Over 3770 1/2

Space between pillars 14 9 7/8 1/2 " 64

do do 8 8 1/2 " 32

do do 4 8 3/4 1/2 " 17 1/2

Total Sq. of stone flooring 3884

do Levelling course of concrete under stone
flooring } 3884

Wood ailing

Beams 5 20 " 3 3/4 375

Joints to adults room 14 31 1/8 " 1 1/4 545 5/12

do to Infants room 14 39 1/4 " 1 1/4 686 7/8

Bressummers 2 102 1/2 " 1 5/6 375 5/6

do 2 46 " 1 5/6 168 2/3

Rafters to verandah 140 13 " 1 1/2 1971 3/4

Hip rafters 4 17 " 1 3/8 93 1/2

Jack rafters 56 6 " 1 1/2 364

Shutters 3 3 1/2 2 4 1/2 94 1/2

Glazed shutters to windows 10 24 " 6 240

Gallery

Over planks 1 20 " 7 1/8 143 1/3

do above 3 20 " 1 60

Total Sq. of wood ailing two coats 5118 17/24

Pairs of 1/3 paneled 1/3 junction
and 1/3 glazed doors with frames
and fitting & complete } 8 4 " 8 8 8

Particulars of work ^{measurement} No. ^{Contents} L B D Total

Pairs of windows & external shutters
outside and glazed shutters
inside with frames and
fittings complete. 10 4 " 6 10 10

Pairs of Panelled shutters with
frames and iron fittings
complete to shelves. 3 (3½ " 4½) 3 3

Glazed ventilating swing windows
with frames and fittings
complete. 18 4 " 1½ 18 18

Painting
Doors both sides 8 4½ 2 8½ 577½
windows 10 4½ 2½ 6½ 686½
ventilating swing windows 18 4 " 1½ 108
Total Sq. of Painting with two coats of
chocolate color paint } 1371½

Hooks for hanging lamps 7 " " " 7 7
Sets of Boards with 10 hat pegs
in each including wood ailing,
and fixing, complete. 10 " " " 10 10

V shaped Drain around the
building. Rft. " 430 " " 430 430

Rft. of 12" V Drain from the
above drain to the nearest
nullah. 300 " " " 300

Particulars of work ^{measurement} No. ^{Contents} L B D Total

Privies and Colonnades

Excavation

Front and rear walls of Privies 4 12½ 2½ 3 375

Side walls to do. 4 7½ 2½ 3 225

Screen walls inside of Privies 2 6 1¾ 1 21

do. behind the Privies 2 26¼ 2¼ 2 236¼

Columns to passage 8 2½ 2½ 3 150

do. half do. 4 2½ ¾ 3 22½

Retaining walls between columns 8 7½ 2 1½ 171

Steps 2 7½ 2 ¾ 22½

Total Cft. of Excavation 1223½

Total Cft. of Foundation stone in chum. 1223½

Basement

Front & rear walls of Adults Privy 2 12 2 ½ 24

Side walls to do. 2 8 2 ½ 16

Screen wall inside of do. 1 5½ 1¼ ½ 37/8

do. behind do. 1 26¼ 1¾ ½ 22¾

Columns to passage 4 2 2 ½ 8

do. half do. 2 2 ¾ ½ 1½

Retaining walls between do. 4 7½ 1½ ½ 227/8

Front & rear walls of Girls Privy 2 12 2 1.78 85½

Side walls to do. 2 8 2 1.78 56¾

Screen wall inside do. 1 5½ 1¼ 1.78 12½

do. behind do. 1 26¼ 1¾ 1.90 90½

Carried over 3437/60

Particulars of work ^{measurements} No. ^{Contents} L B D Total

Brought Over 343 $\frac{73}{160}$

Columns 4 2 2 1.78 28 $\frac{12}{25}$
 do half 2 2 $\frac{3}{4}$ 1.78 5 $\frac{17}{50}$
 Retaining walls between do. 4 7 $\frac{5}{8}$ 1 $\frac{1}{2}$ 1.78 81 $\frac{87}{200}$
 Basement to steps 2 8 2 1.58 50 $\frac{14}{25}$
 Backing to step 2 8 $\frac{1}{2}$ 1 $\frac{1}{2}$ 8 $\frac{1}{2}$
 Total left of Basement stone in chumarr 517 $\frac{617}{800}$

Superstructure

Front and rear walls 4 11 $\frac{1}{2}$ 1 $\frac{1}{2}$ 12 828
 End walls 4 8 $\frac{1}{2}$ 1 $\frac{1}{2}$ 12 612
 Screen walls in side of Privy 2 5 $\frac{3}{4}$ 7 52 $\frac{1}{2}$
 do behind do. 2 26 $\frac{1}{4}$ 1 $\frac{1}{4}$ 6 $\frac{1}{4}$ 410 $\frac{5}{32}$
 Parapets over front & rear wall 4 11 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 69
 do side walls 4 8 $\frac{1}{2}$ 1 $\frac{1}{2}$ 1 51
 Coping over screen walls 2 26 $\frac{1}{4}$ 1 $\frac{3}{4}$ $\frac{1}{2}$ 45 $\frac{15}{16}$
 Total 2068 $\frac{19}{32}$

Deduction

Door ways 2 3 $\frac{1}{2}$ 1 $\frac{1}{2}$ 7 73 $\frac{1}{2}$
 Arches in the side walls of Privy for Honey comb work. } Rectangular portion 4 6 1 $\frac{1}{2}$ 6 216
 } Semi circular portion 4 14 $\frac{1}{8}$ area 1 $\frac{1}{2}$ 84 $\frac{3}{4}$
 Holes behind the seats 6 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 2 27
 Arch work 138
 Total Deduction 539 $\frac{1}{4}$

Total left of superstructure brick in chumarr 1529 $\frac{11}{32}$

Particulars of work ^{measurements} No. ^{Contents} L B D Total

Arch work

Door ways 2 5 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 18 $\frac{3}{4}$
 Arch for Honey Comb Brickwork 4 11 $\frac{3}{4}$ 1 $\frac{1}{2}$ 1 $\frac{1}{2}$ 105 $\frac{3}{4}$
 Holes behind the seats 6 2 1 $\frac{1}{2}$ $\frac{3}{4}$ 13 $\frac{1}{2}$
 Total left of arch work 138

Corrises

Front and rear 4 12 $\frac{1}{2}$. . 50
 Sides 4 12 $\frac{1}{2}$. . 50

Total left of Corrises work 100

Left of stone slabs for steps 4 8 $\frac{1}{2}$. . 34

Total left of Stone slabs for steps 34

Columns 1 $\frac{1}{2}$ feet or 88 feet high with circular bricks in chumarr including cornice plaster and

white washing complete 10 . . . 10 10

Plastering inside

Privies 2 34 . 12 816
 Screen walls around 2 11 $\frac{1}{2}$. 7 161
 do top 2 5 . $\frac{3}{4}$ 7 $\frac{1}{2}$
 Sides of door ways 2 17 $\frac{1}{2}$. 1 $\frac{1}{2}$ 52 $\frac{1}{2}$
 do Arch behind seats 6 4 $\frac{1}{2}$. 1 $\frac{1}{2}$ 40 $\frac{1}{2}$
 Coping to screen wall 2 26 $\frac{1}{4}$. 3 $\frac{1}{2}$ 183 $\frac{3}{4}$
 Parapets inside 2 34 . 1 38
 do top 2 40 . 1 $\frac{1}{2}$ 120

Total 1419 $\frac{1}{4}$

Particulars of work ^{measurement} _{Q. & B. D.} Contents Total

Deductions

Doors	2 3 1/2	7	49
Arches in the side wall of Privies	4 6	6	144
do Circular portion	4 14 1/8	area	56 1/2
Holes behind the seats	6 1 1/2	2	18
Total Deduction			267 1/2

Total Plastering in sides 1151 3/4

Plastering outside

Around the Privies	2 46	12	1104
Screen wall behind do	2 26 1/4	2 6 1/4	656 1/4
Parapets over Privies	2 46	1	92
Basement of front & rear of Girls			
Privy	2 3 1/2	179 112 77	160
do do side	1 12	190	22 1/2
Basement to screen wall	1 26 1/4	190	49 7/8
Basement of front & rear of			
Adults Privy	2 3 1/2	1/2	31 1/2
Basement side wall	1 12	1/2	6
do Screen wall	1 26 1/4	2 1/2	26 1/4
Total			2101 59/200

Deductions

Deduct Door ways	2 3 1/2	7	49
Arches in the side Rectangular portion	4 6	6	144
wall of Privies & Semi-circular portions	4 14 1/8	area	56 1/2
Total Deduction			249 1/2

Total Plastering outside 1851 159/200
 Sqr. of Plastering with two coats of chunnam 30.04
 do white washing, two coats 11.52
 do Blue washing, two coats 18.52

Particulars of work ^{measurement} _{Q. & B. D.} Contents Total

Honey comb or open brickwork

Arches in the side wall of Privies for Honey comb	4 6	6	144
tile work	4 14 1/8	area	56 1/2
Total Sqr. of Honey comb brickwork			2.00 1/2

Woodwork

Joists 1 1/2 ft apart	14 10 3	5 14 7	
wall plates	4 8 1/2	2 1-10-8	
Bressummers to passages	4 21 6	8 28	
Joists 1 1/2 feet apart to do	28 13 1/2	3 5 39 4 6	
Total Cft. of Oak wood wrought & put up			83.10.2

Terracing

Privies	2 10 10	200	
Passages	2 20 14	560	
Total Sqr. of Terracing with brick or edge			
Jelly 3" thick & c.			760

Filling in basement

Privy for Girls	1 8 8 1/4	80	
Passages or colonade	1 17 1/2 8 1/4	175	
Space between columns	4 7 1/8 1/2 1/4	19 1/8	
Total Cft. of Filling in with earth			274 1/8

Asphalting

Privies	2 8 1/2 8 1/2	144 1/2	
Total Sqr. of Asphalte flooring complete			
Laid on concrete 4" thick			144 1/2

Particulars of work ^{Measurements} No. LOD Contents Total

Stone flooring

Passages or colonades — 2 17½ 8 . 280
 space between columns — 6 7½ 1/2 . 227½
 Total Sq. of Stone flooring — 302 7/8
 1/2 Levelling course of concrete 3" 3.02 2/8

Qty. of wrought Iron spouts — 8 4 . . 32 32

Pairs of Battens door with frames and iron fittings completing — 2 3½ . 7 2 2

Wood oiling, two coats

Joists to Prisons — 14 8½ . 1½ 128 1/2
 Bressummers — 4 16½ . 1½ 119 1/8
 Joists — 28 12½ . 1½ 379 7/8
 Total Sq. of wood oiling two coat — 627 1/4

Prison seats — 2 3 . . 6 6

Iron partition

Between seats — 4 2 . . 4 32
 Total Sq. of Iron partition — 32

Urinal Subs. — 2 . . 2 2

Painting

Doors — 2 4 2 7½ 120
 Total Sq. of Painting — 120
 Marking boards — 2

Self

Head of Service Fund

Imperial Ordinary

Class

Original works

Main Head

Military

Sub Head

Military building accommodation for P. H. A and P. Artillery.

To be carried out by the P. H. D.

Abstract Estimate No. of 1876/77

District Bangalore

Names of work. Constructing a School House for whole of the Artillery Forces at Bangalore under G. O. No. 82 Dated 11th August 1876.

Quantity Description of work Rate Per Annual Total

Main Building

5912 Cft. of Excavation . . 1 6/8 31
 1602 do. Concrete . . 3 3 . 325
 3046 do. Foundation . . 3 . . 571
 2425 do. Basement . . 3 . . 455
 4494 do. Superstructure table
 moulded brick chimneys . 4 . . 1124
 399 do. Arch work . . 5 . . 125
 209 Cft. of Cornices etc. . . 590 7/8 75
 185 do. Stone slabs of steps . 400 50 46

Carried Over 2752

Quantity Description of work Rates Per Amount Total

Brought Over 2752

34 Columns $1\frac{1}{2}$ ft. diameter &
8 feet high with circular brick
in chunam including cornices

plastering & whitewashing complete 98 . Each 323

(84.48 Sq. of Plastering with two
coats of chunam 28 . Sq. 211

48.98 do. whitewashing two coats . 29 . 8

35.50 do. Blue washing two coats . 33 . 7

678 $\frac{1}{2}$ Cft. of Teak wood wrought
and put up for Beams
Joists & 38 . Cft. 2376

20 $\frac{1}{2}$ do. Teak wood for Gallery 4 . . . 83

25 $\frac{1}{2}$ Dozens of screws 2" long for
Gallery . 2 . Sq. 3

16.77 Sq. of Terracing with brick
on edge jelly 3" thick & 3

courses of flab tiles and
3 coats of plastering 30 . . Sq. 503

34.43 do. Bengal terracing with
four courses of flab tiles and
3 coats of plastering with
teak weepers complete 22 . . 757

Carried Over 7023

Quantity Description of work Rates Per Amount Total

Brought Over 7023

10 Stone slabs under beams . 4 . Each 3

98 Cft. of wrought Iron posts . 12 . Cft. 74

7768 Cft. of Filling in basement with
earth . . 2 Cft. 81

38.84 Sq. of Stone flooring laid
on 3" concrete & neatly
pointed 178 . Sq. 680

51.19 do. wood oiling two coats 18 . . 77

8 Pairs of 5 panelled & Venetian
and 3 glazed doors with frames
and Iron fittings & complete
4' x 8' 38 . . Each 304

10 Pairs of Venetian windows
with glazed shutters inside
frames and Iron fittings
complete 4' x 6' 51 . . 510

3 Pairs of panelled shutters
with frames and Iron fittings
complete for almy. 14 3 $\frac{1}{2}$ x 4 $\frac{1}{2}$ 1712 . Each 53

18 Glazed ventilating swing
windows with frames & 8 $\frac{1}{2}$ "
complete 4' x 1 $\frac{1}{2}$ 10 . . 180

Carried Over 8985

Quantity Description of Work Rate Per Amount Total

Brought Over 8985

13.72 Lys. of Painting with two
coats of chocolate color 4 . . Lys. 55
7 Hooks for hanging lamps 6 . Each 3
10 No. of boards with 10 hat pegs
in each including wood
oil and fixing complete 5 . . Each 50
4.30 Pft. of V shaped drains
arounding the building 9 . . 6 . . Pft. 161
300 Pft. of 12" V drain of 100 ft
above to nearest wall 7 6 . . 161
1 Marking board 5 . . Each 5

9400

Lundries 520

Total P. for main building 9920

Privies and Colonades

1223 Cft. of Excavation . . 1 Lys. 6
1223 Ls. Foundation stones in
Chunam . . 3 . . 229
518 Ls. Basement Ls. . 3 . . 97
1529 Ls. Superstructure common moulled
brick in Chunam . . 3 . . 287

Carried Over 619 9920

Quantity Description of Work Rate Per Amount Total

Brought Over 619 9920

32 Cft. of Silab. Arch. work brick
in Chunam . . 310 Lys. 8
106 Ls. Circular arch work brick . . 43 . . 28
10 Columns 1 1/2 ft. diam. 8 ft. high
complete . . 98 . . Each 95
2.00 Lys. of Honey Comb brickwork 26 . . Lys. 52
100 Pft. of Cornice work . . 590 Lys. 36
34 Ls. Stone slabs for steps . . 4 . . 9
30.04 Lys. of Plastering with Chunam 2.8 . . Lys. 75
11.52 Ls. White washing to coats . . 29 . . 2
18.52 Ls. Blue washing do . . 33 . . 4
8310.2 Cft. of Ls. wood brought 8
put up . . 38 . . Lys. 293
7.60 Lys. of Plastering with brick on
edge jelly 3" thick 3 courses
of flat tiles and 3 coats of
plastering . . 30 . . Lys. 228
274 Cft. of Filling in basement
with earth . . 2 Lys. 3
1.45 Lys. of Asphalt flooring
laid on 4" concrete . . 25 . . Lys. 36
3.03 Ls. Stone flooring laid on 3"
concrete and neatly pointed 17 8 . . 53
32 Pft. of wrought iron spouts . . 12 . . Pft. 24

Carried Over 1565 9920

4 feet and of 2 1/2 feet to retaining walls.
between pillars or to such other depth
as may be necessary to be matured
and tamped well to a good level.

Foundation. The lower steps
of foundation to main walls and
verandah pillars to be built with
Concrete 12" thick and of 9" to retaining
walls and the upper step of the foundation
to be built with stone in mortar and
properly bonded.

Walls are to be built with Basement
Stone in mortar properly bonded and
raised according to the levels marked in
the plan and to have an offset of 3"
on each side.

The mortar is to be composed of
two parts of sand to one of fresh
and well burnt lime to be ground
before slaked.

Walls for main building Superstructure
1 1/2 feet thick and 16 feet high are to be
built of best table moulded bricks in
mortar and walls for Prince's Common
moulded brick in mortar consisting of
3 parts

splay

Slab arch
work

Cornice

3 parts of sand to two of lime and properly
bonded.

All openings will have splayed
edges, measuring 4" on the face of the
splay.

Over doors and windows
to be gauged and the bricks set in
mortar.

Circular arch work to be of extra
good bricks moulded to the curve of
the arch and set in mortar.

The description of the cornice
should be of the pattern supplied by
the officers in charge of the work —
Cornice bricks to have proper bearing
not less than 4" and set with strong lime

columns or round pillars are to be
built with quadrant shaped bricks in
Chunam, circular slab stones about 3"
thick shall be introduced at such
intervals as the District Engineer
may direct as bond stones. When circular
slab stones are used there shall be two
courses at each place the joints to be
at right angles.

Stone slabs for steps to be of
one stone of the required dimensions
according

according to the nature and size of the steps having the outer sides and edges dressed square and upper surface dressed.

All exterior and interior walls. Plastering are to be plastered after the joints have been scraped out with two coats of Chumam.

The building to be blue washed coloring outside and white washed inside each with two coats.

The whole of the timber to Teak Wood. be of well seasoned and sound teak free from all shakes and knots and neatly finished off.

The roof of the main - Roofing building ~~was~~ to be terraced with brick on edge 3" of jelly, 3 courses of flat tiles and 3 coats of Chumam plaster well rubbed and smoothed supported on joints placed $1\frac{1}{2}$ ft apart from centre to centre, resting on beams and wall plates.

The Verandah to be Bengal terraced with four courses of flat tiles laid in strong Chumam 3 coats of plaster with teak rafters supported on rafters placed $1\frac{1}{2}$ ft apart from centre to centre resting on beams and wall plates.

Spouts

Gallery

Flooring

and oil

placed over columns as shown on the Plan. The scantlings of the various timbers of the roof to be of those written in the Plan.

The wrought-iron spouts having 3" square dia. & 2" thick to be provided and fixed in the position marked on the Plan.

A teak wood sloping gallery to consist of three rows of seats each row 20" wide & 10" high excepting top which will be 16" inches wide running the whole width of the room 20 feet from wall to wall to be provided and fixed at the North end of school in the Infants room as shown on the Plan.

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 1 1/2" thick to be laid on 3" concrete and neatly pointed. The floors of the Princes to be laid with asphalt 3/4" thick on a course of concrete 4" thick.

The wood work of the roof and glazed shutters to the windows to be coated with two coats of wood oil.

Height.

Eight pairs of doors to be furnished. Doors.
 $\frac{1}{2}$ venetian & $\frac{1}{2}$ glazed each 4×8 with
frames $3\frac{1}{2} \times 4\frac{1}{2}$ venetian plank $\frac{1}{2}$ " thick
venetian bar $1 \times 1\frac{1}{2}$ " & strong hinges
locks 9" brass locks with key plates &c
are to be provided and fixed to the
main building and two pairs of
furnished doors $3\frac{1}{2} \times 7$ with frames and
iron fittings complete to be provided and
fixed to the Princes.

Ten pairs of windows 4×6 Windows
glazed shutters inside and venetian
shutters outside with frames & fittings
complete are to be provided and fixed
to the main rooms.

Three almirahs will be fixed Almirah
in the wall in the position marked on
the plan. There will be in each 3 shelf
planks 4 feet long 1 foot wide and 1" thick
made to slide in a grooved frame fixed
in the wall at intervals of $\frac{1}{2}$ feet from
centre to centre, and shutters to be provided
with frames hinges brass bolts and
locks &c complete.

Eighteen glazed ventilating
swing windows 4×6 with frames and
fittings complete to be provided and fixed
over each door and windows. Swing windows

The whole of the doors and windows
ventilating swing windows to be painted
with Painting

Iron hook

Hat pegs

V shaped drain

Privy walls
& iron partition

with two coats of Chocolate color
seven iron hooks $\frac{3}{8}$ " in diameter
to be provided and screwed in the
beams or joists in the main building
for suspending lamps in position to be
pointed out by the District Engineer.

one hundred turned teakwood
hat pegs 7 inches in clear length on
boards 8" broad 1" thick containing not
less than 10 each to be provided and
fixed on the walls in position to be
pointed out by the District Engineer
with iron nails not less than 6" long
and 2 feet apart, pattern peg to be
submitted for approval of W. & C.

A stone V shaped drain to
be constructed around the building
and the same extended for 300 feet in
a direction to be pointed out by the
District Engineer for carrying off the
water.

The Privy walls and iron
partition are to be provided and fixed
in the manner shown on the plan
The planks to be 2" thick and iron
partition 4" thick the wood work to
be coated with two coats of wood oil
and the iron partition with two coats
of coal tar

A.

A tarred animal tubs or buckets
12" dia at top 18" dia at bottom and
18" high with handles ~~yes~~ to be provided
over each Privy.

All superficies
earth arising from excavations and
rubbish about the building to be carted
away and all inequalities of ground
to be levelled in a such a manner as
to assist drainage from the building.
On completion of the works, the
premises to be handed over in a
clean condition.

Dt Engr's Office
Bangalore
4 October 1876
Ld
W. H. P. B. C. Major R. E.
District Engineer
Bangalore

No 108

From

The District Eng.
Bangalore

To
The Chief Engineer
for Roads and
Buildings Branch
Madras.

Date 23rd July 1877.
Recd.

Estimate and Specification
for Constructing a School
house for the whole of the
Artillery Force at
Bangalore

Amounting to Rs 11700-

4019: Oct/1880 No 192

No 108 8667

Roads and Buildings. DISTRICT ENGINEER'S OFFICE

No 95.

BANGALORE 23rd July 1877.

From

The District Engineer

Bangalore

To

The Chief Engineer, P. W. D.
Roads & Buildings Branch
Madras.

Sir,

With reference to G.O. No 82
dated 11th August 1876, I have the
honour to forward herewith for the
sanction of Government, detailed plan
and Estimate amounting to Rs 11700. for
Constructing a School house for the
whole of the Artillery Force 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.

His Excellency remarks that
the work may be executed when
funds are available.

I

I have the honor to be
Sir,

Your most Obedt Servt.

Wm. H. West

Major R. E.

District Engineer

21
 Your most Obedt Servt.
 Henry M. Stuart Major U.S.
 District Engineer.

Roads & Buildings
From
The District Engineer
Bangalore.

To The Chief Engineer
Roads & Buildings
Madras.

Dated 4th
Read October 1877

No. 133.

Standard Plan of
a School house for the
Artillery. Inform
that the cost of the
sanctioning cannot
be traced from the records
of his Office. And the
enclosed and its return
requested when no longer
required.

No. 1123

Public Works Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 17th Oct 1877

Read the following:—

From the District Engineer
Bangalore. } (No. 105 of 23rd July 1877 and
No. 103 of 4th October 1877)

His Grace the Governor
in Council sanctions the plan
and Estimate of Rs 11,700 for
a School house for the whole
of the Artillery Force at
Bangalore.

The work will, if possible
be entered in the Budget of
1878-79.

W. H. P.
17/10 1877

This sanction has been
registered as Imperial No 7213
of 1877-78.

R. A. H. Bangalore
Ex. P. W. D.
Mdy Dept. No. 23-10-77.

July 11th August 1876 P. 82.

Min. July 18th April 1879 P. 715.

Bill of 1877

PUBLIC WORKS

D. I. Bangalae

Dec 19 1907

Wm. B. B. B.
25-10-97