

(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.	3463	Press
B.P. No.		Mis.
Dated	18-12	1876 195

Not to be folded or roughly handled

Read the following:—

No. 431. From the Deputy Chief Engineer, dated 14th December 1876.

*Specification of Works to be performed in constructing a Sub-divisional and Overseer's Office
and Stores.*

Excavation.—The foundation to be excavated to such a depth as the officer in charge of the works may direct.

Brick-in-Chunam.—Foundation to be 2½ feet thick. Basement 2 feet thick and 2 feet deep. Superstructure 1½ feet thick; the whole to be of brick-in-chunam. The bricks to be well wet with water before being used and laid in proper courses.

Arches.—The heads of all openings to have flat arches 18 inches thick; the bricks will radiate to a centre midway between the top and bottom of each opening.

Steps.—Steps, two in front and two in rear, to be built with brick-in-chunam; the treads of each step to be of dressed granite slab.

Teakwood.—The ridge beam, bressummer, wall plates, rafters, and reepers to be of teakwood, sound and well seasoned and free from flaws, and to be neatly wrought in strict accordance with the details given on the drawing.

Doors and Windows.—The doors and windows to be of teakwood. Doors one-third panel and two-thirds venetian. Windows to be half panel and half venetian; the panels to be raised instead of grooved and tongued, and the edges splayed and not moulded. Venetians to be of ordinary construction.

Roofing.—The roof timber to be of teakwood well seasoned. Rafters to be 3 inches × 5 inches placed 18 inches apart from centre to centre, and reepers 2 inches × ½ inch. The rafters of the office room to be supported at their apex by a ridge beam 3 inches × 9 inches. The apex and border of the roof of the remaining rooms to rest upon wall plates 4 inches × 5 inches placed upon the top of the centre dividing wall and nailed, the whole to be covered over with well-burnt flat and pan tiles laid in the usual manner, the ridge and hips to be protected with tiles specially made for the purpose, finish with chunam bands, rough cast on the surface and bands on the tiling.

Plastering.—The interior and exterior walls to have two coats of chunam plaster; the second coat to have a smooth and level surface.

White-wash.—All walls inside to have two coats of best lime wash; the lime to be used hot and slaked on the spot.

Color-wash.—All walls outside to be color-washed by mixing colored earth with lime-wash.

Flooring.—The flooring to be of square pavement tiles laid truly level on a bed of concrete 4½ inches thick. The store rooms to be asphalted ½ inch thick.

Cornice.—The cornice at the gable ends of the roof to be of the ordinary description; the bricks to have a proper bearing not less than 4 inches and set with mortar.

Wood-oiling.—All doors and windows and exposed woodwork to have two coats of wood oil.

Note.—If good, reliable timber for rafters is not obtainable a purlin 5 inches by 4 inches should be used in roofing the rear rooms, the scantlings of the rafters being reduced to 4 inches by 2½ inches.

Proceedings of the Madras Government, Public Works Department,
18th December 1876. No. 3,463.

Estimate for constructing a Sub-divisional and Overseer's Office and Stores.

Description of Work.	MEASUREMENT.				Contents.	Total.	
	No.	Length.	Breadth.	Depth.			
<i>Earthwork.</i>							
Excavating foundation to main longitudinal walls	2	43 0	2 6	3 0	645 0		
Do. to end and cross walls... ..	4	24 6	2 6	3 0	735 0		
Do. longitudinal walls of office room.	2	11 0	2 6	3 0	165 0		
Do. centre dividing walls, &c. ...	2	11 0	2 6	3 0	165 0		
Do. front and rear steps	4	4 0	2 3	1 0	36 0		
Cubic feet	...	...	...	...	1,746 0	64½	
Cubic yards	...	...	...	...	...		
<i>Earth filling.</i>							
Filling in between basements of office stores, &c.	5	11 6	11 6	1 5½	964 3		
Do. to verandahs	2	11 6	4 9	1 5½	159 3		
Cubic feet	...	...	...	...	1,123 6		
Cubic yards	...	...	...	...	...		41½
<i>Brick-in-Chunam Foundations.</i>							
Main longitudinal walls	2	43 0	2 6	3 0	645 0		
End and cross walls... ..	4	24 6	2 6	3 0	735 0		
Longitudinal walls of office room ...	2	11 0	2 6	3 0	165 0		
Centre dividing walls	2	11 0	2 6	3 0	165 0		
Front and rear steps	4	4 0	2 3	1 0	36 0		
Cubic feet	...	...	...	...	...	1,746	
<i>Basement.</i>							
Main longitudinal walls	2	42 6	2 0	2 0	340 0		
End and cross walls	4	25 0	2 0	2 0	400 0		
Longitudinal walls of office room ...	2	11 6	2 0	2 0	92 0		
Centre dividing walls	2	11 6	2 0	2 0	92 0		
Front and rear steps	4	3 6	2 3	0 6	15 9		
Cubic feet	...	...	...	...	...	939½	
<i>Superstructure.</i>							
Main longitudinal walls	2	29 3	1 6	8 0	702 0		
Centre dividing wall	1	23 6	1 6	17 0	726 9		
End and cross walls	3	24 0	1 6	8 0	864 0		
Gables over do.	3	24 0	1 6	4 6	486 0		
Front wall of office room	1	15 0	1 6	12 6	281 3		
Gables over do.	1	15 0	1 6	2 3	50 7½		
Longitudinal walls of office room ...	2	12 0	1 6	12 6	450 0		
Pillars of verandah	2	1 6	1 6	7 3	32 7½		
					3,593 3		
<i>Deductions.</i>							
Doors	10	3 6	1 6	7 0	367 6		
Flat archwork over doors	10	4 6	1 6	1 3	84 4½		
Windows	5	3 0	1 6	4 0	90 0		
Flat archwork over windows	5	4 0	1 6	1 3	37 6		
					579 4½	3,013½	
Cubic feet	...	...	...	...	...		

Proceedings of the Madras Government, Public Works Department,
18th December 1876. No. 3,463.

Estimate for constructing a Sub-divisional and Overseer's Office and Stores—(Continued).

Description of Work.	MEASUREMENT.				Contents.	Total.
	No.	Length.	Breadth.	Depth.		
<i>Flat Archwork.</i>						
Flat archwork over doors and windows as per deductions above						
Cubic feet... ..	...	...	...	...	...	122
<i>Dressed Stonework.</i>						
Dressed stone for steps in front and rear	16	3 6	0 9	...	42 0	
Square feet ...	...	...	...	...	...	42
<i>Teakwood.</i>						
Ridge beam in office room	1	14 0	0 3	0 9	2 7 6	
Rafters	54	18 9	0 3	0 5	105 5 7½	
Do.	2	11 0	0 3	0 5	2 3 6	
Do.	2	14 0	0 6	0 9	10 6 0	
Bressummers in side verandahs						
Wall plates in longitudinal walls of office room	2	15 0	0 4	0 5	4 2 0	
Do. in main longitudinal walls... ..	3	28 6	0 4	0 5	11 10 6	
Cubic feet ..	...	...	...	...	...	136 11 1½
<i>Doors and Windows.</i>						
Doors one-third panel and two-thirds venetian with frame and fittings...	10	3 6	...	7 0	245 0	
Windows half panel and half venetian with frame and fittings ...	5	3 0	...	4 0	60 0	
Square feet ...	...	...	...	...	...	305
<i>Tiled Roofing.</i>						
Roofing with teakwood reepers, flat and pan tiles, chunam borders, &c.	2	43 6	19 0	...	1,653	
Squares ...	...	...	...	...	...	16-53
<i>Plastering.</i>						
Interior walls of office room ...	1	48 0	...	13 0	624 0	
Do. gable do.	2	12 0	...	2 3	54 0	
Do. walls of stores, Sub-divisional Officers and Overseer's rooms.	4	48 0	...	8 6	1,632 0	
Do. half gables of cross walls ...	8	12 0	...	4 3	408 0	
Do. upper portion of centre dividing walls	4	12 0	...	8 6	408 0	
Exterior of longitudinal walls of office room	2	13 6	...	12 0	324 0	
Do. front wall of do.	1	15 0	...	12 0	180 0	
Do. gable of do. do.	1	15 0	...	2 6	37 6	
Do. verandah walls	2	5 3	...	8 0	84 0	
Do. do. gables	2	5 3	...	2 0	24 0	
Do. longitudinal walls	2	28 6	...	7 6	427 6	
Do. end wall in rear	1	28 6	...	7 6	213 9	
Do. gable over do.	1	28 6	...	4 3	138 11½	
Pillars and half pillars in verandah.	3	6 0	...	7 3	130 6	
Sides and soffits of doors	10	17 6	...	1 2	204 2	
Do. do. of windows	5	15 0	...	1 2	87 6	
Basement all round... ..	1	135 0	...	2 0	270 0	
					5,244 10½	

Proceedings of the Madras Government, Public Works Department,
18th December 1876. No. 3,463.

Estimate for constructing a Sub-divisional and Overseer's Office and Stores—(Continued).

Description of Work.	MEASUREMENT.				Contents.	Total.
	No.	Length.	Breadth.	Depth.		
<i>Deductions.</i>		FT. IN.	FT. IN.	FT. IN.	FT. IN.	
Doors on both sides...	20	3 6	...	7 0	490 0	
Windows do. ...	10	3 0	...	4 0	120 0	
					610 0	
Square feet ...	...	...	...	...	4,634 10½	4635
Squares ...	...	...	...	...	...	
WHITE AND COLOR WASHING THE SAME AS PLASTERING.						
Flooring with Square Pavement Tiles.						
Office, Sub-divisional and Overseer's rooms ...	3	12 0	12 0	...	432 0	
Verandahs ...	2	13 6	5 3	...	141 9	
Door pieces ...	6	3 6	1 2	...	24 6	
Do. ...	2	3 6	0 4	...	2 4	
Longitudinal pieces between pillars.	2	9 6	1 6	...	23 6	
Square feet ...	...	...	...	...	629 1	629
Squares ...	...	...	...	...	...	
Flooring with Asphalt.						
Store rooms ...	2	12 0	12 0	...	288 0	
Door pieces ...	4	3 6	0 10	...	11 8	
Square feet ...	...	...	...	...	299 8	3
Squares ...	...	...	...	...	...	
Cornice Work.						
Front gable of roof ...	2	9 6	...	...	19 0	
Rear do. do. ...	2	18 0	...	...	36 0	
Lineal feet ...	...	...	...	...	...	55
Wood-oiling.						
Doors, panel portion ...	2	10	3 6	2 4	163 4	
Do., venetian do. ...	3	10	3 6	4 8	490 0	
Windows, panel do. ...	2	5	3 0	2 0	60 0	
Do., venetian do. ...	3	5	3 0	2 0	90 0	
Brossummers ...	2	14 0	...	2 0	56 0	
Square feet ...	...	...	...	...	859 4	859
Squares ...	...	...	...	...	...	

Proceedings of the Madras Government, Public Works Department,
18th December 1876. No. 3,463.

ABSTRACT OF ESTIMATE.

Quantities.	Item.	Rate.	Per	Amount.	Total.
		RS.	C. yd.	RS.	RS.
64½	Cubic yards, excavating foundation ...	...	...	...	...
41½	Do., earth filling ...	...	...	...	...
1,746	Cubic feet, brickwork in foundation ...	...	C. ft.	...	...
939½	Do. in basement ...	...	"	...	...
3,014	Do. in superstructure ...	...	"	...	...
122	Do. flat archwork over doors and windows.	...	Sq. ft.	...	...
42	Square feet, dressed stone work ...	...	C. ft.	...	...
137	Cubic feet, teakwood wrought and put up.	...	Sq. ft.	...	...
305	Square feet, doors and windows ...	...	Square.	...	...
1653	Squares, tiled roofing ...	...	"	...	...
4635	Do., plastering with two coats of chunam.	...	"	...	...
629	Do., flooring with square pavement tiles.	...	"	...	...
3	Do., with asphalt ½ inch ...	...	Lin. ft.	...	...
55	Lineal feet, cornice work ...	...	Square.	...	...
4635	Squares, white and color washing ...	...	"	...	...
859	Do., wood oiling, two coats ...	...	"	...	...
	Contingencies at 5 per cent. ...	...	...	...	...
	Total, Estimate ...	...	...	...	...

MADRAS, (Signed) W. FAREWELL, Colonel,
7th December 1876. Deputy Chief Engineer, P.W.D.

No. 432. ORDER THEREON, 18th December 1876, No. 3,463.

CIVIL WORKS, No. 24.

ORDERED that the design prepared by the Chief Engineer be adopted as the standard design for Sub-divisional and Overseers' Offices, and that it be lithographed and distributed to all District Engineers.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

To District Engineers.
To the Consulting Architect.

Exd. E. C. Shunker.
Spare Copies

Circular

No 3463

Civil Works
Public Works Dept

Proceedings of the Madras Government.
Under date the 18th Dec 76
Read the following:-

From

The Dy Chief Engineer (R.E. No. 14 Dec 1876.)

Ordered that the
design prepared by the
Chief Engineer be adopted
as the standard design
for Subdivisional and
Overseers' Offices, and
that it be lithographed
and distributed to all
District Engineers.

Amr W.H.
13.12.76

Dy. Architect
Supt. of Works

design and specification Sept 25-1-77

Call. R.

Specification of Works to be performed in Con-
structing a Sub divisional & Officers Office
& Store.

Excavation.

The foundation to be excavated to such a depth
as the Officer in charge of the Work may direct.

Brick in Chumam.

Foundation to be 2 1/2 ft thick. Base of
2 ft thick & 2 ft deep. Superstructure 1 1/2 ft thick.
the whole to be of Brick in Chumam. The bricks
to be well wet with water before being used, and
laid in proper Courses.

Arches.

The heads of all openings to have flat-
Arches 18 inches thick, the bricks with radiate
to a Centre midway between the top & bottom of
each Opening.

Steps.

Steps two in front & two in rear to be
built with brick in Chumam, the treads of
each step to be of dressed Granite slab.

Sea wood.

The Ridge beam, Braced minor wall plate,
Rafters & purlins to be of Sea wood, sound &
well seasoned & free from flaws, and to be neatly
wrought in strict accordance with the details
given on the drawing.

Doors & Windows.

The Doors & Windows to be of Sea wood,
Doors one third panel & two thirds Venetian.
Windows to be half panel & half Venetian, the
panels to be raised instead of grooved & tenoned,
& the Edges splayed & not moulded. Venetians
to be of Ordinary Construction.

Roofing.

The Roof timber to be of Sea wood, well
seasoned. Rafters to be 3"x5" placed 18 inches
apart from Centre to Centre & purlins 2"x2". The
Rafters of the Office room to be supported at their
Apex by a ridge beam 3"x9". The Apex & border
of the roof of the remaining rooms to rest upon
wall plates 4"x5" placed upon the top of the
Centre dividing wall & nailed, the whole to be
Covered over with well burnt flat & pan tiles

laid

laid in the usual manner, the ridge & hips to be protected with tiles, specially made for the purpose, finish with Chumam bands, rough Cast on the surface & bands on the tiling.

The interior & Exterior walls, to have two Coats of Chumam plaster the second Coat to have a smooth & level surface.

All walls inside to have two Coats of best lime wash, the lime to be used hot & slaked on the spot.

All walls Outside to be Color washed by mixing Colored Earth with lime wash.

The flooring to be of Square pavement tiles laid truly level, on a bed of Concrete $\frac{1}{2}$ inches thick. The Store rooms to be Asphalted $\frac{3}{4}$ inch thick.

The Cornice at the Gable Ends of the Roof to be of the ordinary description, the bricks to have a proper bearing not less than 4 inches & set with mortar.

All Doors & Windows & Exposed wood work to have 2 Coats of Wood Oil.

P.W.D.

16 DEC 76

1.

Plastering.

White wash.

Color Wash.

Flooring.

Cornice

Wood oiling.

Note. If good reliable timber for Rafters is not obtainable a Partin 5" x 4" should be used in roofing the rear rooms the scantling of the Rafters being reduced to 4" x 2 1/2"

Wh

22.1.77

Print on separate paper and Paste below "Wood oiling" and Specification.

Wh

Estimate for constructing a Sub. Divisional and Overseers Office and Stores.

Description of Work.	Measurement No. L. B. & Contents.	Total.
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Earthwork.

Excavating foundation to Main longitudinal Walls	2 43.0 2.6 3.0 645.0	
do to End and Cross Walls	4 24.6 2.6 3.0 738.0	
do Longitudinal Walls of Office room	2 11.0 2.6 3.0 165.0	
do Centre dividing Walls &c	2 11.0 2.6 3.0 165.0	
do Front & Rear Steps	4 4.0 2.3 1.0 36.0	
Cubical	1746	
Cubical ft	643 3/4	

Earth filling.

Filling in between basements of Office Stores &c	5 11.6 11.2 15 964.3	
do to Verandah	2 11.6 4.9 15 159.3	
Cubical	1123.6	
Cubical ft	41 1/2	

Brick in Chumam

Main Longitudinal Walls	2 43.0 2.6 3.0 645.0	
End and Cross Walls	4 24.6 2.6 3.0 738.0	
Longitudinal Walls of Office room	2 11.0 2.6 3.0 165.0	
Centre Dividing Walls	2 11.0 2.6 3.0 165.0	
Front & Rear Steps	4 4.0 2.3 1.0 36.0	
Cubical ft	1746	

Basement

Main Longitudinal Walls	2 42.6 2.0 2.0 340.0	
End & Cross Walls	4 25.0 2.0 2.0 400.0	
Longitudinal Walls of Office room	2 11.6 2.0 2.0 92.0	
Centre Dividing Walls	2 11.6 2.0 2.0 92.0	
Front & rear Steps	4 3.6 2.3 .6 15.9	
Cubical ft	939 3/4	

Superstructure

Main Longitudinal Walls	2 29.3 1.6 8.0 702.0	
Centre Dividing Wall	1 28.6 1.6 17.0 726.9	
Carried Over	1428.9	

Brought forward 1428-9

End and Cross Walls	3	24-0	1-6	8-0	864-0
Gables over do	3	24-0	1-6	4-6	436-0
Front Wall of Office room	1	15-0	1-6	12-6	281-3
Gables over do	1	15-0	1-6	2-3	50-7½
Longitudinal Walls of Office room	2	12-0	1-6	12-6	450-0
Pillars of Verandah	2	1-6	1-6	7-3	32-7½

Deductions 3593-3

Doors	10	3-6	1-6	7-0	367-6
Flat Arch Work over do	10	4-6	1-6	1-3	84-4½
Windows	5	3-0	1-6	4-0	90-0
Flat Arch Work over do	5	4-0	1-6	1-3	37-6

579-4½

Cubic ft. 3013½

Flat Arch Work over Doors & Windows as per deductions above Cubic ft. 122

Open Stone for Steps in front & rear 16 3-6 0-9 42

Square ft. 42

Ridge beam in Office room	1	14-0	0-3	0-9	2-7-6
Rafters	54	18-9	0-3	0-5	105-5 7½
do	2	11-0	0-3	0-5	2-3-6

Bressummers in side Verandahs 2 14-0 0-6 0-9 10-6-0

Wall plates in Longitudinal Walls of Office room 2 15-0 0-4 0-5 4-2-0

do in Main Longitudinal Wall 3 28-6 0-4 0-5 11-10-6

Cubic ft. 136-11-12

Doors ½ Panel and 2 Venetian with frame & fittings 10 3-6 0-7 0-245-0

Windows ½ Panel & 2 Venetian do 5 3-0 0-4 0-60-0

Square ft. 305

Roofing with Teakwood shingles, flat & pan tiles, Chumau borders &c 2 43-6 19-0 1653

Squares 1653

Plastering

Interior Walls of Office room 1 48-0 13-0 624-0

do Gable do 2 12-0 2-3 54-0

do Walls of Store, Sub divisional Offices & Overseer's rooms 4 48-0 8-6 1632-0

do Half Gables of Cross Walls 8 12-0 4-3 408-0

do Upper portion of Centre cladding Walls 2 12-0 8-6 408-0

Exterior of Longitudinal Walls of Office room 2 15-0 12-0 180-0

do front Wall of do 1 15-0 2-6 37-6

do Gable of do do 2 5-3 8-0 84-0

do Verandah Wall 2 5-3 2-0 24-0

do do Gables 2 28-6 7-6 427-6

do Longitudinal Walls 1 28-6 7-6 213-9

do End Wall in rear 1 28-6 4-7 138-11½

do Gable over do 3 6-0 7-3 130-6

Pillars & half Pillars in Verandah 10 17-6 1-2 204-2

Sides & soffits of Doors 5 15-0 1-2 87-6

do of Windows 1 135-0 2-0 270-0

Basement all round 5244-10½

Deductions 20 3-6 7-0 490-0

Doors on both sides 10 3-0 4-0 120-0

Windows do 610-0

Square ft. 4634-10½

Squares 46-35

White & Coler Washing, the same as Plastering

Plastering with square pavement tiles

Office, Sub divisional & Overseer's rooms 3 12-0 12-0 432-0

Verandahs 2 13-6 5-3 141-9

Door pieces 6 3-6 1-2 24-6

do 2 3-6 0-4 2-4

Longitudinal pieces between Pillars 2 9-6 1-6 28-6

Square ft. 629-1

Squares 6-29

Flouring with lops hall

Store rooms 2 12-0 12-0 288-0

Door pieces 4 3-6 0-10 11-8

Square ft. 299-8

Squares 3

Cornice Work

Front Gable of Roof	2	9.6	19.0
Rear do do	2	18.0	36.0
Wood Ceiling		Lineal ft	55
Doors panel portion	2	10 3.6	2.4 163.4
do Venetian do	3	10 3.6	4.8 490.0
Windows panel do	2	5 3.0	2.0 60.0
do Venetian do	3	5 3.0	2.0 90.0
Pressurians	2	14.0	2.0 56.0
		Square ft	859.4
		Squares	8.59

Abstract of Estimate.

Quantities	Item.	Rate.	Per.	Amount.	Total.
64 3/4	Cubic Yards Excavating foundation				Cy.
41 1/2	do Earth filling				do
1746	Cubic ft Brickwork in foundation				Cft
939 3/4	do do in Basement				do
3014	do do in Superstructure				do
122	do Flat Arch work over Doors & Windows				do
42	Square ft Dressed Stone Work				Sq ft
137	Cubic ft Teakwood wrought & put up				Cft
305	Square ft Doors & Windows				Sq ft
16.53	Squares Tiled Roofing				Sqs
46.35	do Plastering with 2 Coats of Chumau				do
6.29	do Flooring with Square pavement tiles				do
3	do do with Asphalt 3/4				do
55	Lineal ft Cornice work				L ft
46.55	Squares White & Color washing				Sqs
8.59	do Wood Oiling - 2 Coats				do

Contingencies at 5 per Cent.

Total Estimate Rupees

Chief Engineer's Office.
Madras.
December 7th 1876

W. H. D. Colonel.
Deputy Chief Engineer.

No

Memorandum

It is proposed that the accompanying plan, estimate and specification be adopted as the standard design for Sub Divisional and Overseers' Offices.

Warwick Colonel
Offg Dy Chief Engineer

Fort George
14 December 1873

H. A. G.

9/5/3

Gob. of Madras.
PUBLIC WORKS.

To *Chief Engineer*

Dated *19-12*

Issued

Recd. Encl.

G. O. 18 *1876*, No. *3462*

Nos. *13/12*

Sub: Divisional and District Office

The Standard design for
— revised the litho-
graph and distributed to
all Divs for adoption.

Ent. P. W. D.

P.W.D.

1876

1876

*From
Chief Engineer
to
District Engineer
for
the
Divisional Office*

*2. x Standard
(P.W.D.)
P. W. D.
Divisional Office
Standard design for
Divisional Office
P.W.D.*

G.O. 18 Dec 1876 No. 3462