B. No 3127 W. d/ 18 — 11 — 87
" 639 W. " 3. 3 — 87
" 2545 W. " 24. 9. 87
G. O. 2438 W. " 9. 9. 87
B. No 199 W. " 21 — 1 — 87
G. O. 2938 W. " 8 — 11 — 86
" 2217 W. " 4. 9 — 86
" 2216 W. " 4 — 9 — 86
2215 W. " 4. 9 — 86
3887. " 7. 9. 86

B/25 / ~~E. 6505~~ ~~Est 4720~~ / 4/ 20 - August 1888

P. W. Cir 6505

From ③

The Supg. Engineer,
Fourth Circle.

The outlay of Rs 223 incurred in excess of the sanctioned Estimate for the purchase of a machine for testing Laterite blocks in the West Coast Division is sanctioned.

6. 7. 88

9/7/88

Dated 2nd July 1888
Recd 4: 7: 88

No: 273
E.W.

Enclo: 1

Machine for testing Laterite Blocks:-

Requesting to obtain the sanction of Government to the excess of Rs. 223-6-3 on the sanctioned estimate for purchasing a —

[illegible] a [illegible] charge for [illegible]

9/7/88

6/7

Submit reply to reference [illegible] [illegible] Circle

To The S. E. IV Circle
Examr of P. W. A.

10/8/88

21/8

Cd. 6-7-88

24/8

With Order

ANNEXURE.

Revised standard design for a Sub-Registrar's office with terraced roofing.

Descriptive Specification.

Foundations.—A depth of 4 feet is provided in the estimate, but this should be settled locally in accordance with the nature of the soil.

Walling.—The walls should be carried up in English bond two bricks thick, verandah wall one brick thick.

Stone-work.—The stone-slabs under verandah posts should measure 10½″ × 10½″ × 6″ with mortice holes 2″ square and 2″ deep, into which the posts will be tennoned. The steps may also be of stone-slabs, if easily procurable.

Wood-work.—The verandah posts, bressummers and joists should be of Burma or Indian teakwood, well seasoned.

Doors.—Provide a venetian and panel door for the entrance and a strong battened door for the record room (according to the detail shown in the plan for tiled roofing), both doors to be provided with a good Europe rim lock.

Windows.—Venetian windows to be provided for the office and windows with glazed inner shutters, battened outer shutters and iron bars, ¾ inch square, set diagonally, for the record room. The sills of all windows should slope outwards with a small opening under the frame to allow water to flow out. All doors and windows to be provided with strong iron bolts and hinges and hooks for fastening when opened, and the venetians to have wooden buttons for securing when closed.

Sun-shades.—Sun-shades to be provided for each of the end windows of the office.

Roofing.—The roofing of the office and record room will be of "pucka terracing," care being taken that proper slopes are made for drainage towards the weep-holes, which will have shoots made with redwood or teakwood projecting at least 2 feet from the face of the wall. The verandah roof will be of Bengal terrace or of Mangalore tiles, where they are easily obtainable.

Flooring.—The floor may be of square bricks or stone-slabs, if the latter are easily procurable. The record room should be floored with asphalte, ¾ inch thick.

Interior and exterior finishing.—The interior of the building should be plastered and rubbed smooth or plastered and whitewashed. Where good bricks or stone is available, the exterior should be pointed, otherwise plastered.

If the soil is damp, river sand to a depth of 1 foot at least should be laid below the flooring, and the interior walls to a depth of about 3 feet all round plastered with Portland cement half an inch thick. The exterior plinth should also be plastered with cement.

Painting.—The roof timbers, sun-shades, doors and windows to be painted with three coats of Carson's oak paint.

Ventilation.—Holes to be left between the joists measuring 4″ × 6″ sloping outwards and closed with wire-netting of ¾ inch mesh to prevent birds and bats entering.

(Signed) J. W. BRASSINGTON,
Consulting Architect to Government.

Detail measurements.

Detail of work.	Number.	Measurements in feet.						Area of contents.	Total quantity of each description of work.
		Length.		Breadth.		Depth.			
		FT.	IN.	FT.	IN.	FT.	IN.		
Excavation for foundations—									
Outer walls	...	108	0	3	6	4	0	} 1,855	
Cross wall	1	24	6	3	6	4	0		
Verandah wall	...	35	6	2	4½	4	0	337	
Steps	...	12	0	3	6	1	0	42	
								C. feet.	2,234

Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet.						Area or contents.	Total quantity of each description of work.
		Length.		Breadth.		Depth.			
		FT.	IN.	FT.	IN.	FT.	IN.		
Earth filling in basement—									
Record room	1	25	6	12	0	1	6	747	
Clerks' do.	1	16	0	12	0	1	6		
Registrar's room	1	9	6	12	0	2	6	285	
Verandah	1	24	6	5	9	1	6	211	
								C. feet.	1,243
Concrete—									
Outer walls...	...	108	0	3	6	1	6	696	
Cross wall	1	24	6	3	6	1	6		
Verandah wall	...	35	6	2	4½	1	6	126	
Steps	...	12	0	3	6	1	0	42	
								C. feet.	864
Brick-work in foundations and basement—									
Outer walls footing course ...	...	108	0	2	7½	1	6	522	
Cross wall do. ...	...	24	5½	2	7½	1	6		
Verandah wall do. ...	...	36	5½	1	6	1	6	82	
Outer wall above footing course...	...	108	0	1	10½	3	0	749	
Cross wall do. ...	...	25	1½	1	10½	3	0		
Verandah wall do. ...	...	37	1½	0	9	3	0	84	
Steps do.	1	7	6	1	0	0	6	4	
Do. do.	1	9	6	2	0	0	6	10	
Do. do.	1	11	6	3	0	0	6	17	
								C. feet.	1,468
Brick-work in superstructure—									
Outer walls	...	108	0	1	6	13	0	2,106	
Cross wall	1	25	6	1	6	13	9	526	
Parapet	...	109	6	1	1½	1	0	123	
Coping	...	117	0	0	9	0	9	66	
									2,821
Deductions—									
Doors	2	4	0	1	6	8	0	96	
Windows	8	3	6	1	6	5	0	210	
Arch-work as per details ...	...	...		...		...		86	
									392
								C. feet.	2,429
Arch-work over doors and windows—									
Over doors	2	5	6	1	6	1	1½	86	C. feet.
Windows	8	5	0	1	6	1	1½		
Stone-work—									
Under posts	4	0	10½	0	10½	0	6	2	C. feet.
Teakwood wrought and put up—									
Joists	42	13	6	0	3	0	7	83	
Verandah posts	4	0	6	0	6	7	6	8	
Do. bressummers	1	28	0	0	6	0	6	7	
Do. rafters	22	8	6	0	3	0	4	16	

Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet.						Area or contents.	Total quantity of each description of work.
		Length.		Breadth.		Depth.			
		FT.	IN.	FT.	IN.	FT.	IN.		
Teakwood wrought and put up—*cont.*									
Verandah pieces at ends	2	7	0	0	3	0	4	1	
Do. planks at ends ...	2	7	0	0	1	1	6	2	
Railing in clerks' room—									
Hand rail	1	9	6	0	3	0	2½	1	
Bottom piece	1	9	6	0	3	0	2½		
Uprights	17	3	0	0	1½	0	1½	1	
Do. at end	1	3	6	0	3	0	3		
								C. feet.	119
Venetian and panel door with frames, &c., complete	1	4	0	...		8	0	32	S. feet.
Batten door with frames complete ...	1	4	0	...		8	0	32	S. feet.
Venetian windows with frames complete—									
For office	2	3	6	...		5	0	35	S. feet.
Venetian windows with frames and glazed inner shutters complete ...	2	3	6	...		5	0	35	S. feet.
Batten windows with frames, iron bars ¾″ square and inner glazed shutters complete—									
For record room	4	3	6	...		5	0	70	S. feet.
Galvanised iron wire-netting to cover holes between joists...	40	0	6	...		0	8	13	S. feet.
Sun-shades complete		2 in number.							
Terrace roofing—									
For office and record room ...	1	27	0	...		27	0	729 Squares.	S. feet. 7·29
Bengal terrace—									
For verandah	1	27	6	...		8	0	220 Squares.	S. feet. 2·20
Plastering with chunam interior walls—									
Office and record room	2	75	0	...		9	0	1,350	
Door jambs	2	14	0	...		1	6	42	
Window jambs	8	17	0	...		1	6	204	
Top of parapet	...	109	0	...		1	3	136	
Inside of parapet	...	104	0	...		1	0	104	
									1,836
Deductions—									
Doors	3	4	0	...		5	0	60	
Windows	8	3	6	...		5	0	140	
									200
								S. feet. Squares.	1,636 16·36
Plastering with Portland cement ½ an inch thick—									
Office and record room	2	75	0	...		3	0	450	
Plinth exterior	...	128	0	...		2	3	288	

Detail measurements—*cont.*

Detail of work.	Number.	MEASUREMENTS IN FEET.						Area or contents.	Total quantity of each description of work.
		Length.		Breadth.		Depth.			
		FT.	IN.	FT.	IN.	FT.	IN.		
Plastering with Portland cement ½ an inch thick—*cont.*									
Sides of steps	2	2	0	...		1	6	6	
Door jambs	2	6	0	...		1	6	18	
									762
Deduct—									
Doors	3	4	0	...		3	0	...	
									36
								S. feet.	726
								Squares.	7·26
Pointing exterior—									
Walls	...	114	0	...		15	6	...	
									1,767
Deduct—									
Door	1	4	0	...		8	0	32	
Windows	8	3	6	...		5	0	140	
									172
								S. feet.	1,595
								Squares.	15·95
Flooring with 8 inches square bricks—									
Office	1	25	6	...		12	0	306	
Door piece	1	4	0	...		1	6	6	
Verandah	1	26	0	...		6	6	169	
Steps	1	11	6	...		3	0	35	
								S. feet.	516
								Squares.	5·16
Flooring with asphalte ¾ inch thick over a bed of concrete 4 inches thick—									
Record room	1	25	6	...		12	0	306	
Door piece	1	4	0	...		1	0	4	
								S. feet.	310
								Squares.	3·10
Painting with three coats—									
Joists	42	13	6	...		1	5	803	
Verandah posts	4	2	0	...		7	6	60	
Bressummers	1	27	6	...		2	0	55	
Rafters	22	8	6	...		1	3	234	
Planking at ends	2	7	0	...		3	0	42	
Railing	1	18	0	...		3	0	54	
Venetian and panel door ...	3	4	0	...		8	0	96	
Batten door	2	4	0	...		8	0	64	
Venetian windows ... 4 ×	2	3	6	...		5	0	140	
Do. with glazed shutters 5 ×	2	3	6	...		5	0	175	
Batten windows with glazed shutters and iron bars ... 4 ×	4	3	6	...		5	0	280	
Sun-shades	4	5	0	...		5	0	100	
Do.	2	2	0	...		2	0	8	
								S. feet.	2,111
								Squares.	21·11

ABSTRACT.

Quantity.	Description of work.	Rate.	Per	Amount.	Total.
		RS.		RS.	RS.
2,234 C. feet.	Excavation for foundations ...		1,000 C. ft.		
1,243 ,,	Earth filling in basement		,,		
864 ,,	Concrete in foundations		100 C. ft.		
1,468 ,,	Brick-work in foundations and basement		,,		
2,429 ,,	Brick-work in superstructure ...		,,		
86 ,,	Arch-work		,,		
2 ,,	Stone-work under posts		C. ft.		
119 ,,	Teakwood wrought and put up ...		,,		
32 Sq. ft.	Venetian and panel door with frames, hooks and rim lock, complete		Sq. ft.		
32 ,,	Batten door do do. ...		,,		
35 ,,	Venetian windows with frames, hooks, &c., complete		,,		
35 ,,	Venetian windows with frames and glazed inner shutters, hooks, &c., complete		,,		
70 ,,	Battened windows with frames, iron bars and inner glazed shutters, hooks, &c., complete		,,		
13 ,,	Galvanised iron wire-netting ...		,,		
2 No.	Sun-shades		Each.		
7·29 Sqs.	Terrace roofing		Square.		
2·20 ,,	Bengal terrace		,,		
16·36 ,,	Plastering interior walls with two coats of chunam		,,		
7·26 ,,	Plastering with Portland cement ½ an inch thick		Square.		
15·95 ,,	Pointing exterior walls		,,		
5·16 ,,	Flooring with 8 inches square bricks laid in mortar over a levelling course of wall bricks		,,		
3·10 ,,	Flooring with asphalte ¾ inch thick over a bed of concrete 4 inches thick		,,		
21·11 ,,	Painting with three coats of Carson's paint		,,		
	Petty supervision at 2½ per cent.				
	Contingencies at 5 per cent. ...		,,		
	Grand Total of estimate ...				

MADRAS,
8th June 1888.

(Signed) J. W. BRASSINGTON,
Consulting Architect to Government.

Revised standard design for a Sub-Registrar's office with tiled roofing.

Descriptive Specification.

Foundations.—A depth of 4 feet is provided in the quantities, but this should be settled locally in accordance with the nature of the soil.

Walling.—The walls should be carried up in English bond 2 bricks thick, verandah wall 1 brick thick.

Stone-work.—The stone-slabs under verandah posts should be 10½″ × 10½″ × 6″ with mortice holes 2 inches square and 2 inches deep into which the posts will be tennoned. The steps may also be of stone-slabs if easily procurable.

Wood-work.—The verandah posts should be of Burma or Indian teakwood, well seasoned. The rafters and other roof timbers may be of approved country wood.

Doors.—Provide a venetian and panel door for the entrance and a strong battened door for the record room, both doors to be provided with a good Europe rim lock.

Windows.—Venetian windows to be provided for the office, and windows with glazed inner shutters, battened outer shutters, and iron bars ¾ inch square set diagonally for the record room. The sills of all windows should slope outwards with a small opening under the frame to allow water to flow out. All doors and windows to be provided with strong iron bolts and hinges and hooks for fastening when opened and the venetians to have wooden buttons for securing when closed.

Sun-shades.—Sun-shades to be provided for each of the end windows of the office.

Roofing.—The roof will be of the usual flat and pan-tiles or Mangalore tiles; in the latter case, the rafters should be spaced about 2′ 6″ apart centre to centre and a ceiling of ½ inch planking provided.

Flooring.—The floor may be of square bricks or stone-slabs if the latter are easily procurable. The record room should be floored with asphalte ¾ inch thick.

Interior and exterior finishing.—The interior of the building should be plastered and rubbed smooth or plastered and whitewashed. Where good bricks or stone is obtained, the exterior should be pointed, otherwise plastered.

If the soil is damp, river sand to a depth of 1 foot at least should be laid below the flooring, and the interior walls to a depth of about 3 feet all round plastered with Portland cement half an inch thick. The exterior plinth should also be plastered with cement.

Painting.—The roof timbers, sun-shades, doors and windows to be painted with three coats of Carson's oak paint.

Ventilation.—For ventilation, the spaces between the rafters measuring about 15″ × 6″ and sloping outwards may be left open and galvanised iron wire-netting of ¾ inch mesh nailed in between to prevent birds and bats entering.

(Signed) J. W. BRASSINGTON,
Consulting Architect to Government.

Detail measurements.

Detail of work.	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
		FT. IN.	FT. IN.	FT. IN.		
Excavation for foundations—						
Outer walls	...	108 0	3 6	4 0	1,855	
Cross wall	1	24 6	3 6	4 0		
Verandah wall	...	35 6	2 4½	4 0	337	
Steps	...	12 0	3 6	1 0	42	
					C. feet.	2,234
Earth filling in basement—						
Record room	...	25 6	12 0	1 6	747	
Clerks' room	...	16 0	12 0	1 6		
Registrar's room	...	9 6	12 0	2 6	285	
Verandah	...	24 6	5 9	1 6	211	
					C. feet.	1,243
Concrete—						
Outer walls	...	108 0	3 6	1 6	696	
Cross wall	1	24 6	3 6	1 6		
Verandah wall	...	35 6	2 4½	1 6	126	
Steps	...	12 0	3 6	1 0	42	
					C. feet.	864
Brick-work in foundations to floor level—						
Outer wall footing course ...	...	108 0	2 7½	1 6	522	
Cross do. do. ...	...	24 5½	2 7½	1 6		
Verandah do. do. ...	...	36 5½	1 6	1 6	82	
Outer wall above footing course..	...	108 0	1 10½	3 0	749	
Cross wall	...	25 1½	1 10½	3 0		

Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
		FT. IN.	FT. IN.	FT. IN.		
Brick-work in foundations to floor level—*cont.*						
Verandah wall above	...	37 1½	0 9	3 0	84	
Steps	...	7 6	1 0	0 6	4	
Do.	...	9 6	2 0	0 6	10	
Do.	...	11 6	3 0	0 6	17	
					C. feet.	1,468
Brick-work in superstructure—						
Outer walls	...	108 0	1 6	12 6	2,025	
Cross wall	1	25 6	1 6	21 6	822	
Gables	2	28 6	1 6	4 9	406	
						3,253
Deductions—						
Doors	2	4 0	1 6	8 0	96	
Windows	8	3 6	1 6	5 0	210	
Arch-work as per details... ...	...	...	...	...	86	
						392
					C. feet.	2,861
Arches over doors and windows—						
Over doors	2	5 6	1 6	1 1½	86	C. feet.
Windows	8	5 0	1 6	1 1½		
Stone-work—						
Under posts	4	0 10½	0 10½	0 6	2	C. feet.
Wood-work—						
Wall-plates	3	26 0	0 4	0 3	7	
Rafters	36	18 6	0 3	0 7	97	
Railing in clerks' room—						
Hand rail	1	9 6	0 3	0 2½	1	
Bottom piece	1	9 6	0 3	0 2½		
Uprights	17	3 0	0 1½	0 1½	1	
Do. at end	1	3 6	0 3	0 3		
Verandah—						
Posts	2	0 6	0 6	8 0	7	
Do.	2	0 6	0 6	6 6		
Brackets	2	1 0	0 6	0 4	1	
Do.	2	0 7½	0 6	0 6		
Bressummers	2	10 0	0 6	0 6	5	
Do. piece at ends ...	2	7 0	0 3	0 4	1	
Valley rafters	2	11 0	0 3	0 5	3	
Do. ridge	1	8 6	0 3	0 5		
Rafters	16	9 6	0 2½	0 4	15	
Do. small rafters	10	6 0 average length.	0 2½	0 4		
Collar piece	1	6 0	0 3	0 3	1	
Finial	1	4 6	0 3	0 3		
Barge planks	2	7 0	0 6	0 1	1	
Do.	2	2 6	1 6	0 1	1	
Planking at ends	2	7 0	0 1	2 6	3	
					C. feet.	144
Venetian and panel doors with frames complete	1	4 0	...	8 0	32	Sq. feet.

Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
		FT. IN.	FT. IN.	FT. IN.		
Batten door with frames complete ...	1	4 0	...	8 0	32	Sq. feet.
Venetian windows with frames complete for office	2	3 6	...	5 0	35	Sq. feet.
Venetian windows with glazed inner shutters for office	2	3 6	...	5 0	35	Sq. feet.
Batten windows with frames, iron bars, and inner glazed shutters for record room	4	3 6	...	5 0	70	Sq. feet.
Galvanised iron wire-netting between joists	2	26 0	...	0 8	35	Sq. feet.
Sun-shades		2 in number.				
Tiled roofing—						
Office and record room	2	29 6	...	37 6	2,213	
Verandah	1	22 9	...	8 0	} 242	
Do.	1	7 6	...	8 0		
					Sq. feet.	2,455
					Squares.	24·55
Plastering—						
Office and record room	2	75 0	...	14 6	2,175	
Door jambs	2	14 0	...	1 6	42	
Window jambs	8	17 0	...	1 6	204	
						2,421
Deductions—						
Doors	3	4 0	...	5 0	60	
Windows	8	3 6	...	5 0	140	
						200
					Sq. feet.	2,221
					Squares.	22·21
Plastering with Portland cement ½ an inch thick—						
Office and record room	2	75 0	...	3 0	450	
Door jambs	2	6 0	...	1 6	18	
Plinth exterior	...	128 0	...	2 3	288	
Sides of steps	2	2 0	...	1 6	6	
					Sq. feet.	762
					Squares.	7·62
Pointing exterior—						
Walls	...	114 0	...	12 0	1,368	
Gables	2	28 6	...	4 9	271	
						1,639
Deduct—						
Door	1	4 0	...	8 0	32	
Windows	8	3 6	...	5 0	140	172
					Sq. feet.	1,467
					Squares.	14·67

Detail measurements—*cont.*

Detail of work.	Number.	Measurements in feet.			Area or contents.	Total quantity of each description of work.
		Length.	Breadth.	Depth.		
		FT. IN.	FT. IN.	FT. IN.		
Flooring with 8 inches square bricks—						
Office	1	25 6	...	12 0	306	
Door piece	1	4 0	...	1 6	6	
Verandah	1	26 0	...	6 6	169	
Steps	1	11 6	...	3 0	35	
					Sq. feet.	516
					Squares.	5·16
Flooring with asphalte ¾ inch thick over a bed of concrete 4 inches thick—						
Record room	1	25 6	...	12 0	306	
Door piece	1	4 0	...	1 0	4	
					Sq. feet.	310
					Squares.	3·10
Painting with three coats of Carson's paint—						
Rafters	36	18 6	...	1 5	944	
Railing	...	18 0	...	3 0	54	
Verandah—						
Posts	2	2 0	...	7 6	} 54	
Do.	2	2 0	...	6 0		
Brackets	2	1 0	...	1 3	3	
Do.	2	1 0	...	1 6	3	
Bressummers	2	10 0	...	2 0	40	
Piece at end	2	7 0	...	0 6	7	
Valley rafter and ridge	...	30 0	...	1 0	30	
Rafters	...	212 0	...	0 10½	186	
Collar piece and finial	...	10 6	...	1 0	11	
Planks	2	7 0	...	1 1	15	
Do.	4	2 6	...	1 6	15	
Do.	4	7 0	...	2 6	70	
Venetian and panel door ...	3	4 0	...	8 0	96	
Batten door	2	4 0	...	8 0	64	
Venetian windows ... 4 ×	2	3 6	...	5 0	140	
Do. with glazed shutters 5 ×	2	3 6	...	5 0	175	
Batten windows with shutters and iron bars ... ... 4 ×	4	3 6	...	5 0	280	
Sun-shades	4	5 0	...	5 0	100	
Do.	4	2 0	...	2 0	16	
					Sq. feet.	2,303
					Squares.	23·03

ABSTRACT.

Quantity.	Description of work.	Rate.	Per	Amount.	Total.
		RS.		RS.	RS.
2,234 C. feet.	Excavation for foundations ...		1,000 C. feet.		
1,243 "	Earth filling in basement		"		
864 "	Concrete in foundations		100 C. feet.		
1,468 "	Brick-work in foundations and basement		"		
2,861 "	Brick-work in superstructure ...		"		
86 "	Arch-work		"		
2 "	Stone-work under posts		C. feeet.		
144 "	Teakwood wrought and put up ...		"		
32 Sq. feet.	Venetian and panelled door with frames, hooks and rim lock, complete		Sq. feet.		
32 "	Batten door with frames, hooks, and rim lock, complete ...		"		
35 "	Venetian windows with frames, hooks, &c., complete		"		
35 "	Venetian windows with frames and glazed inner shutters, hooks, &c., complete		"		
70 "	Battened windows with frames, iron bars, and inner glazed shutters, hooks, &c., complete		"		
35 "	Galvanised iron wire-netting fixed.				
2 No.	Sun-shades		Each.		
24·55 Squares.	Tiled roofing with flat and pan-tiles and teak reepers		Square.		
22 21 "	Plastering interior walls with two coats of chunam		"		
7·62 "	Plastering interior walls with Portland cement $\frac{1}{2}$ an inch thick ...		"		
14·67 "	Pointing exterior walls		"		
5·16 "	Flooring with 8-inch square bricks laid in mortar over a levelling course of wall bricks		"		
3·10 "	Flooring with asphalte $\frac{3}{4}$ inch thick over a bed of concrete 4 inches thick		"		
23·03 "	Painting with three coats of Carson's paint		"		
	Petty supervision at $2\frac{1}{2}$ per cent.				
	Contingencies at 5 per cent ...		"		
	Grand Total of Estimate ...				

Madras,
8th June 1888.

(Signed) J. W. BRASSINGTON,
Consulting Architect to Government.

21st July 1888, No. 2230 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers:—

From J. W. BRASSINGTON, Esq., Consulting Architect to the Government of Madras, to the Chief Engineer, Public Works Department, dated Chepâk, 8th June 1888, No. 414.

G.O. No. 879 W., dated 16th March 1888.
" " 1333 W., " 7th May "

With reference to the orders of Government marginally noted, I have the honor to submit revised standard designs for Sub-Registrars' offices, with tiled roof and terraced roof, with specifications and schedules of quantities.

No. 334 D.

Forwarded for the approval of Government in the Judicial Department.

Ootacamund,
16th June 1888.

(Signed) J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

Referred to the Inspector-General of Registration for remarks.

(By Order.)

(Signed) A. G. CARDEW,
Ag. Under-Secretary.

22nd June 1888.

From G. HAMNETT, Esq., Inspector-General of Registration, to the Chief Secretary to Government, dated Madras, 28th June 1888, G. No. 2700.

With reference to endorsement, Judicial, (returned with plans and papers), dated the 22nd June 1888, on a letter from the Consulting Architect to the Government, submitting revised designs for Sub-Registry offices with tiled roof and terraced roof, I have the honor to state that the accommodation provided in the revised design is precisely the same as that provided in the design sanctioned in 1885, and that so far as departmental needs are concerned, I have no remarks to make.

2. As regards artistic appearances, I am no judge, but I should not omit to mention, for the information of the Government, that in the tiled roof design the "dormer" has been omitted, apparently because it was difficult to build, and still more difficult to keep from leaking.

3. The terraced roof design is about the same. It is to be hoped that wherever this design is adopted by the Public Works Department, the terrace will be carefully and substantially built to prevent it from leaking.

4. The estimate for the two designs does not make provision for any lightning conductors. They may, or may not, be required in some places.

Transferred to the Public Works Department with papers received under endorsement No. 334 D., dated 16th June 1888, returned, and with an intimation that Government in this department approve of the revised type-designs.

(By Order.)

(Signed) A. G. CARDEW,
Ag. Under-Secretary.

7th July 1888.

Order—dated 21st July 1888, No. 2230 W., Public Works.

The revised type-designs, with descriptive specifications and estimates of quantities for Sub-Registrars' offices will be circulated to officers of the Public Works Department in supersession of previous type-designs for similar buildings.

2. Lightning conductors are not considered necessary for these buildings.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

To Superintending Engineers.
To the Consulting Architect to Government.
,, Judicial Department.

Exd. F. R. Bantleman.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1888} Madras.

PUBLIC WORKS.

Dated July, 21st.

Recd. *Encl.*

G.O., 21st July 1888, No. 2230 W.

JULY.

Type-designs

Circulating the revised — with descriptive specifications and estimates of quantities for Sub-Registrars' offices in supersession of previous type-designs.

4th September 1886, No. 2215 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following papers :—

From Colonel J. BEATTY, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated Coimbatore, 7th August 1886, No. 295 E.W.

Adverting to G.O., No. 1760 W., of 13th ultimo, I have the honor to submit an indent (in duplicate) for a hydraulic crushing tester, and to state that its cost may be met from the lump sum allotment under tools and plant for the current official year for the West Coast division.

Memorandum to the General Superintendent, Public Works Stores, dated 10th August 1886, No. 2736 C.

From H. O'CONNELL, Esq., General Superintendent, Public Works Stores, to the Superintending Engineer, V Circle, dated Madras, 13th August 1886, No. 499 S.

With reference to G.O., No. 1760 W., dated 13th July 1886, forwarded with your letter, No. 2205, of the 12th August 1886, I have the honor to submit indent (in triplicate) on the Home Government for one hydraulic crushing tester required by the Superintending Engineer, IV Circle, prepared in the prescribed form.

2. In pricing the indent in sterling money, I have taken the exchange at 2 shillings the rupee, in accordance with paragraph 4 of the revised rules recorded with G.O., dated 25th January 1886, No. 202 W., Public Works.

3. The papers received with your letter are herewith returned.

Endorsement on the above.

No. 2307.

Forwarded to the Chief Engineer, Public Works Department, through the Examiner of Public Works Accounts.

Red Hills,
17th August 1886.

(Signed) W. H. BURTON, Colonel, R.E.,
Superintending Engineer, V Circle.

No. 262 S.E., 5th.

Forwarded to the Chief Engineer, Public Works Department, with the necessary certificate.

25th August 1886.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

CERTIFICATE by the Examiner, Public Works Accounts.

Number and date of indent or letter with which received.	Description and value of articles indented for.		Work to which the value is chargeable.	Grant.		Certificate to be initialled by the Examiner.
				Amount.	Authority.	
1	2		3	4	5	6
	Provincial.	£ s. d.	West Coast Division.	RS.		
S.E.'s (5th) letter, No. 230, dated 17th August 1886.	1 Hydraulic crushing tester.	116 4 0	Tools and plant ..	1,500	G.O., No. 1594 W., dated 23rd June 1886.	I certify that funds to meet the outlay which it is estimated will be incurred in England in connection with this indent during the year 1886-87 have been provided for in the estimates of the Public Works Department to the extent of £ 116-4-0.

MADRAS,
25th August 1886.

(Signed) D. C. GORDON,
Examiner, Public Works Accounts.

From the Superintending Engineer, IV Circle, dated 28th August 1886, No. 153 C.E.W.

ORDER—dated 4th September 1886, No. 2215 W., Public Works.

The indent will be forwarded to the Director-General of Stores at the India Office for compliance.

(Here enter No. 2216 W., dated 4th September 1886.)

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, IV Circle.
,, ,, ,, V ,,
,, Examiner, Public Works Accounts.

Exd. E. Fernandez.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated September, 4th.

Recd. *Encl.*

G.O., 4th Sept. 1886, No. 2215 W.

SEPTEMBER.

Indent

The — for an hydraulic crushing tester to test the properties of laterite, to be forwarded to the Director-General of Stores, India Office, for compliance.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Letter—from

Colonel J. SHAW-STEWART, R.E.,
Secretary to the Govt. of Madras,
Public Works Department,

To

The DIRECTOR-GENERAL of STORES,
India Office, London.

Sir,

I am directed to forward, herewith, for favor of compliance, an indent (in duplicate) for an hydraulic crushing tester required for testing the crushing weight and other properties of laterite.

2. A certificate by the Examiner, Public Works Accounts, to the effect that the necessary funds have been provided, accompanies.

G.O., No. 2215 W., dated 4th September 1886.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

Fort St. George,
4th September 1886.

Exd. E. Fernandes.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated September, 4th.

Recd. *Encl.*

4th September 1886, No. 2216 W.

SEPTEMBER.

Indent

An — for an hydraulic crushing tester to test the properties of laterite, forwarded to the Director-General of Stores, India Office.

4th September 1886, No. 2217 W., Public Works.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Letter—from

Colonel J. SHAW-STEWART, R.E.,
Secretary to the Government of Madras,
Public Works Department,

To

The SECRETARY to the GOVERNMENT of INDIA,
Public Works Department.

Sir,

I am directed to forward, for information, copy of my No. 2216 W., of this date, to the Director-General of Stores, accompanied by the triplicate copy of the indent referred to therein.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) J. SHAW-STEWART, Colonel, R.E.,
Secretary to Govt., P.W.D.

Fort St. George,
4th September 1886.

Exd. E. Fernandez.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated September, 4th.

Recd. *Encl.*

4th September 1886, No. 2217 W.

SEPTEMBER.

Indent

Copy of letter to the Director-General of Stores, India Office, forwarding an — for an hydraulic crushing tester to test the properties of laterite, forwarded to the Government of India.

8th November 1886, No. 2938 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following letter from A. A. JOPP, Esq., Director-General of Stores, to the Secretary to the Government of Madras, Public Works Department, dated India Office, London, 14th October 1886, No. 10121 S.A.:—

With reference to your letters of the 4th and 10th September 1886, Nos. 2216 W. and 2285 W., forwarding indents for an hydraulic crushing tester and iron chain, &c., it is observed that the indents are not accompanied by the certificate referred to in the margin as provided for in the 9th clause of the revised rules for procedure in obtaining stores from this country, and I am to request that the provisions of this clause may be complied with in future indents.

Clause 9.—Each indent must carry a certificate of the necessity for the stores indented for and that they cannot be advantageously procured of local manufacture, or from surplus stores of other departments, railways, or administrations.

Order—dated 8th November 1886, No. 2938 W., Public Works.

Communicated to the Superintending Engineer, V Circle, who will, in future, attach to all indents on the Home Government, a certificate as described in clause 9 of the rules printed with proceedings, dated 25th January 1886, No. 202 W.

(True Extract.)

(Signed) J. O. HASTED, Colonel, R.E.,
Secretary to Govt., P.W.D.

To the Superintending Engineer, V Circle.
To other Superintending Engineers.
To the Chief Engineer for Irrigation.
„ Examiner, Public Works Accounts.

Exd. E. Fernandez.
Spare copies

GENERAL.
ACCOUNT.

Govt. of {1886} Madras.

PUBLIC WORKS.

Dated November, 8th.

Recd. *Encl.*

G.O., 8th Nov. 1886, No. 2938 W.

NOVEMBER.

Indents

Letter from the Director-General of Stores, India Office, pointing out that, in the case of certain — for English stores from V Circle, the provisions of one of the revised rules for procedure in obtaining stores from England have not been complied with, communicated to Superintending Engineer, V Circle.

13TH JANUARY 1887, No. 50, FINANCIAL.

GOVERNMENT OF MADRAS.

FINANCIAL DEPARTMENT.

READ—the following paper:—

Despatch from the Right Honorable Lord CROSS, Her Majesty's Secretary of State for India, to His Excellency the Right Honorable the Governor in Council, Fort St. George, dated India Office, London, 2nd December 1886, No. 15 (Financial—Stores).

With reference to the letters noted in the accompanying list, I have to inform your Excellency that I have sanctioned compliance with the indents therewith forwarded.

ENCLOSURES.

Letter from Secretary to Government of Madras in the Financial Department, No. 647, dated 14th July 1886.

(Stationery Stores.)

Letter from Secretary to Government of Madras in the Revenue Department, No. 66, dated 9th August 1886.

(Survey Instruments for Board of Revenue.)

Letter from Secretary to Government of Madras in the Public Works Department, No. 2216 W., dated 4th September 1886.

(Hydraulic Crushing Tester.)

ORDER—dated 13th January 1887, No. 50, Financial.

Recorded.

(True Extract.)

H. E. STOKES,
Ag. Chief Secretary.

To the Superintendent of Stationery.
„ Accountant-General.
„ Revenue Department.
„ Public Works Department.

Exd. J. Henricus.

No. 199 W. d/ 21-1-87

Govt. of {1887} Madras.

FINANCIAL.

Communicated
to officers concerned
with reference to
G.O. No. 2215 W. dated
4th September 1886.
(Sd) J. O. H.
W.

Issued

Recd. *Encl.*

G.O., 13th January 1887, No. 50.

B. No. 199 W. d/ 21-1-87

JANUARY.

Stores.

Recording despatch from Secretary of State intimating having sanctioned the supply of certain stationery and other — indented for by this Government.

S. E. IV & V circles
Exr. P. W. Accts.

With order

9th September 1887, No. 2438 W., Public Works.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

General.
Account.

Read—the following memorandum from the Inspector-General of Railway Stores, to the Secretary to Government, Public Works Department, dated India Office, London, 12th August 1887.

The undermentioned drawings, &c., are forwarded as stated below :—

Number on drawing.		Description of work.	Contractors.	Contract.		Number of Copies sent	
				Class.	Number.	Herewith.	Herewith.
Original.	Completion.						Photos.
..	..	General drawing of laterite testing machine.	Sir J. Whitworth and Company.	..	11/127	1	3
..	..	Drawing steel yards, &c., of laterite testing machine.	Do.	..	do.	1	
..	..	Drawing of arrangement of levers, &c., of laterite testing machine.	Do.	..	do.	1	
	Indent, dated 4th September 1886.		Date of Order 18th January 1887.				

(Signed) H. HYDE,
Inspector-General of Railway Stores.

Order—dated 9th September 1887, No. 2438 W., Public Works.

Communicated to the Superintending Engineer, IV Circle, with reference to the undermentioned orders :—

No. 2215 W., of 4th September 1886.
No. 2938 W., of 8th November „
No. 199 W., of 21st January 1887.

(True Extract.)

Captain, R.E.,
Under Secy. to Govt., P.W.D.

To the Superintending Engineer, IV Circle, with six plans.
„ „ V „
„ Examiner, Public Works Accounts.

Exd. J. Moses.
Spare Copies

GENERAL.
ACCOUNT.

Govt. of {1887} Madras.
PUBLIC WORKS.

Dated September, 9th.

Recd. *Encl.*

G.O., 9th Sept. 1887, No. 2438 W.

SEPTEMBER.

Drawings

Letter from the Inspector-General of Railway Stores forwarding — of certain machinery, communicated to the Superintending Engineer, IV Circle.

INDIA OFFICE,
12 August 1887.

Memo.

From the INSPECTOR GENERAL OF RAILWAY STORES
To the Secretary to the Government
Public Works Department
Madras. —

The under-mentioned Drawings &c are forwarded — as stated below

Number on Drawing.		Description of Work.	Contractors.	Contract.		Number of Copies sent.	
				Class.	No.	Herewith	~~By P. & O. parcel post on~~ Herewith
Original.	Completion.					~~Drawings.~~	Photos.
—	—	General Drawing of Laterite testing Machine —	Sir J. Whitworth & Co	—	11/127	1	3
—	—	Drawing. Steel yards &c. of do —	do	—	do	1	
—	—	Drawing of Arrangement of levers &c. of do	do	—	do	1	
		Indent d^d 4/9/86	Date of order. 18/1/87				

H. Hyde
Inspector General of Railway Stores.
per J. Edes.

A Y 15427. 500.—4/87. I. 840.

B. M. 199 W. 21-1-87
Q. 6. 2938 W. 8. 11. 86
" 2284 / 2285 / 2286 W. 10. 9. 86
" 1679 W. 2. 7. 86
" 202 W. 26. 1. 86
" 2215 / 2216 / 2217 W. 4. 9. 86.

General Account

No. 2438 W of 9th Sept 1887

A/

Communicated to the Suptg. Engr. IV circle with reference to the undermentioned orders -

No. 2215 W of 4th Septr. 1886
No. 2938 W of 8th Novr. 1886
No. 199 W of 21st Jany 1887

MCR
6. 9. 87

7/9/87.

19/9/87

S. E. IV circle, with 6 plans
S. E. V circle " 6 plans
Exr. P. W. Accts.

Supg. IV
M. 7. 9. 87

O. 6. 9. 87 R. 9. 9. 87.

P.W.C. No. 6952

1

(2)

R 5. 9. 87

E.
(+ plans)

6952

Govt. of {1887} Madras.

PUBLIC WORKS.

Pres 12/9/87

Dated

Recd. Encl.

G.O., 9/9/ 1887, No. 2438W

Drawings

Letter from the ~~Director~~ Inspector General of Railway Stores forwarding ___ of certain machinery. communicated to the Supdg Engr. IV. Circle.

Wd 4.55 PM

60
4

9/9

India Office,
Whitehall, London,
26 Aug. 1887.

The drawings to be given to T.
14.9.87

The Secretary to the Government,
Public Works Department,
Madras.

Sir,

+ GOms 2438W of 9/9/87

With reference to my memo[+] dated 12th. Inst. forwarding 3 drawings of the Laterite Testing Machine. I have now the honor to forward a second set of those drawings, and request the favor of your forwarding the same to the Superintending Engineer of the 4th. Circle, if you have not already sent him the set forwarded on the 12th.

I am, Sir,
Your obedient Servant,

H Hyde

Major General R. E.

Inspector General of Railway Stores.
per T. Edis

G.O. 2438W, 9-9-87
R. No 199W. 21.1.87
G.O. 2938W. 8.11.86
" 2284.2285 & 2286W 10.9.86
" 2215. 2216 & 2217W. 4.9.86
" 1679W. 2.7.86
" 202W. 25.1.86

P.W.C. No. 7327

(4)

Recorded with reference to G.O No 2438W dated 9th Septr 1887

~~No 2545 W d/24th Septr/87~~

10-9-87

R 20.9.87

No 2545 W d/24th Septr/87

£ + 3

(+ plans)

22/9/87

24-9-87

The Drawings have been given to S.T.

Taken
19-9-87

O.D. 152.IV.
M. 22.9.87

@ 20.9.86 R. 24.9.87

6210 87

With Side

A Y 9035. 2 rms.—11/85. Wt. P. 1627.

It is requested that in any further communication on this subject the under-mentioned letters and number may be quoted, and the reply addressed to
The Director General of Stores,
India Office,
Westminster, S.W.

S 12.

India Office, London,
2nd February 1887.

Sir,

With reference to your Indent dated 4th September 1887, I have the honour to inform you that, after consideration, it has been decided to substitute a Machine with a worm wheel and screw for the Hydraulic testing Machine demanded. Recent experience in the Railway Department has shewn that the efficiency of an hydraulic Pump in such work depends entirely on the condition of the Leathers, which can only be maintained in an efficient condition by mechanics possessing special experience of such work.

A copy of the specification of the Machine ordered is annexed, the machine will cost only £60; and the Contractors are to provide in it a receptacle for blocks which is

The Secretary to Government,
Public Works Department,
Madras.

6

It is requested that the reply may be addressed—
The Director General of Stores,
India Office,
London.

India Office, London,
7th February 1887.

The Director General of Stores for India presents his compliments to

The Secretary to Government,
Public Works Department, Madras

and begs to forward a press copy of a letter which he had the honour of addressing to him by the last mail.

S.12

527

I.S.C
P.W. 1508/87

The Testing Machine for Laterite Blocks, consisting of a ~~cast~~ iron base fitted with a platform and levers somewhat similar to a weighing machine, bracket pillar, and steel yard, fitted with a weight adjusted by a screw and hand wheel.

The base fitted with two steel uprights, having a cross head on the top, fitted with a steel screw, friction clutch, worm, and wheel and hand wheel.

A steel die fitted with a brass nut is guided on the two steel pillars.

The case for the Laterite Block is placed on the platform, and the pressure is put on by the cross handle, through the worm wheel and screw; the pressure being transmitted through the levers to the steel yard which gives the pressure on the block.

After the Laterite block is tested the friction clutch on the top of the screw is thrown

S.12

thrown out, and the die raised quickly by means of the hand ~~wheel~~.

The machine is arranged to test up to 5 Tons total pressure.

L. 1
PW 180 of/87

A Y 9035. 2 rms.—11/85. Wt. P. 1627.

527

24 FEB 87

It is requested that in any further communication on this subject the under-mentioned letters and number may be quoted, and the reply addressed to
The Director General of Stores,
India Office,
Westminster, S.W.

S12.

India Office, London,
2nd February 1887.

Sir,

With reference to your Indent dated 4th September 1886, I have the honour to inform you that, after consideration, it has been decided to substitute a Machine with a worm wheel and screw for the Hydraulic testing Machine demanded. Recent experience in the Railway Department has shewn that the efficiency of an hydraulic Pump in such work depends entirely on the condition of the Leathers, which can only be maintained in an efficient condition by mechanics possessing special experience of such work.

A copy of the Specification of the Machine ordered is annexed; the machine will cost only £60; and the Contractors are to provide in it a receptacle for blocks which is

The Secretary to Government,
Public Works Department.
Madras.

is to be not less than 12¼" long, 9¼" wide, and 4¼" deep.

I have the honor to be,

Sir,

Your obedient servant,

Director General of Stores.

P.W.C. No. 1508

No. 639 W d/ March 3. 1887

B

Comd. ~~to~~

officers concerned

with reference to

GOs No 2215 W

dated 4th Septr 1886

and 199 W dated

21st January 1887

Comd. to

officers concerned with

reference to

GOs No. 2215 W

d/ 4 Sep. 86 and

199-W. d/ 21st

January 1887.

Rg 25.2.87

M:!

No. 639 W d/ March 3. 1887

MCR

25.2.87

Jm

25/2/87.

199 W 21.1.87.
2938 W 8.11.86.
2217 W 4.9.86.
2216
2215

S. Es. IV + V Circles

1. Es. IV & V C.

Exr. P.W. acct

Exr.

L

8/3/87

Cor. 5/3

DW/W

No: 454/MW

Superintending Engr's Office IV Cir
Camp, Ootacamund 9th Novr 1887

From,

Colonel J. Beatty R.E.;
Superintending Engineer IV Cir

To,

The Chief Engineer
P.W. Department.

Sir,

With reference to G. O. No. 639 W date 3rd March 1887, I have the honor to forwar for Sanction an estimate amounting to Rs 900 for the machine for testing lateri blocks received from England, in Substitution of the Hydraulic crushin tester Sanctioned in G. O. No. 1760 dated 13th July 1886.

2. A duplicate abstract of the estimate is also herewith sent.

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

J. Beatty Colonel R.E.;
Superintending Engineer IV Cir

202 W d/ 25/1/86
2215 W d/ 4/9/86
199 W d/ 21/1/87
139 W d/ 3/3/87
545 W d/ 24/9/87
2438 W d/ 7/9/87

PWCN 9170

From

Colonel J. Beatty RE,
Supg: Engr: 4th Circle

[illegible] 87
DEPARTMENT

Dated 9th } Nov: /87.
Recd: 14th }

No 3127 W d/ 18th Nov/87

No. 454
E.W.

Enclo: 1 2

Machine for Testing Laterite Blocks:-

Forwarding for sanction an Estimate of Rs. 900 for a —.

Public Works Department.

Current No. 9170
Letter No. 454 E.W.
Dated the 9th November 1887
From the Supg: Engr: IV Circle

NOTE OF REMARKS.

The accompanying estimate amounting to Rs 900 provides for the cost, and carriage from Madras to Calicut, of a Crushing Machine for testing laterite, obtained on indent from the Director General of Stores at the India Office vide G.O. No 2215 W d/ 4th September 1886.

The necessity for the machine is explained in G.O. No 399 W d/ 13th Feby/86 and the reports therein printed.

15/11/87

P.T.O.

Three tracings of a Crushing Machine was received with C No 7327 from the ~~Inspector~~ General of Railway Stores, these are put up in the file but I don't think they should go S.E. is apparently one set has been sent to that Office with G.O. No 2436 W dt 9/9/87 –

15/11/87

D/ please register sanction

Cu 15/11

No 3127 W.

PUBLIC WORKS DEPARTMENT.

B/

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 18th Novr/87

READ the following

Letter from the Supdg Engineer, IV Circle, HE. No 453/Ew. of 9th Novr 1887.

The estimate amounting to Rs 900 for the purchase of a machine required for use in the West Coast Division for testing laterite blocks, is sanctioned.

2. This sanction has been registered as Provincial No 125 W of 1887-88, and classified as Tools and Plant.

17.11.87

D/ 19/11

2. The Supdg Engr, IV Circle, with one enclosure.

" Examr P. W. Accounts with the dup: abst: estimate

17/11/87

Cu

W 17/11

Name of Work.—Purchasing a machine for testing Laterite Clocks.
Fund.— Provincial
Departmental Head.— Original.
Service Head.— Tools and Plant.
Main Head of Classification.—
Sub-head of Classification.—
Arm of the Service.—
Reference to last Work Voucher submitted.—No. —— for the month of —————— 188 .

Sub-heads of Estimate.	As Estimated.			As executed.					Difference.*					Reference to paras. over-leaf explaining differences.
	Quantity.	Rate.	Amount	Quantity.	Rate.	Amount.			Quantity.	Rate.	Amount.			
		Rs.	Rs.		Rs.	Rs.	A.	P.		Rs.	Rs.	A.	P.	
Cost of machine for testing Laterite Clocks.	1	832	832	1	1073	1073	1	"			241	1	"	
Conveyance hire for -do- from Madras to Beypore			38											
Do. from Beypore to Calicut including Harber dues & freight.			11			50	5	3			17	10	9	
Contingencies			19											
Carried over			900			1123	6	3			223	6	3	

* Excesses to be entered in red ink.

Sub-heads of Estimate.	As Estimated.			As executed.					Difference.*					Reference to paras. over-leaf explaining differences.
	Quantity.	Rate.	Amount	Quantity.	Rate.	Amount.			Quantity.	Rate.	Amount.			
		Rs.	Rs.		Rs.	Rs.	A.	P.		Rs.	Rs.	A.	P.	
Brought forward ..			900			1123	6	3			223	6	3	
Total ..		Rs. 900				Rs. 1123-6-3					Rs. 223-6-3			

* Excesses to be entered in red ink.

[*N.B.*—When any considerable deviations from the original design have occurred the report, specification, drawing, and details of the measurements of the work actually done, in the same form as the estimates, should accompany the Completion Reports.]

CERTIFICATE.

I do hereby certify that, with the exceptions above noted and explained, this work has been fully executed to the extent of the estimate in a substantial and satisfactory manner, as regards materials and workmanship, and that, excluding trifling deviations and those explained over-leaf, it corresponds in all respects with the sanctioned plan and estimate.

A. W. Fraser Col. R.E.

Dated 29th [illegible] 188

Executive Engineer.

Names of Engineers and Subordinates by whom the Work was supervised, giving the dates of their several incumbencies, i.e., the dates of taking and making over charge, in connection therewith.

Names.	Period of Incumbency.	
	From	To
F. J. Wilson Esqr Executive Engineer	September 1887	March 1888.
Colonel A. T. Fraser R E Executive Engineer		S. 1 P.W. 8259

Explanations of differences and proposals as to disposal of materials at site.

Excess is due to charges advised by the Superintendent P.W. Stores Madras not included in his statement of No 954 d/ 29th September 1887

Value of 3 General Drawings showing details of testing Machine for Laterite Blocks received per S.S. Warda:—

3	Drawings showing details of Levers	Rs: 254-8-4
3	do. Steel yard	
6	Photographs	

29 June /88

A T Fraser Col RE

Executive Engineer

SUPERINTENDING ENGINEER'S OFFICE,
V Circle, Madras,

No. 1728

Bangalore ~~Chepauk~~ 21st July 1888.

From
Coll. H. M. Vibart R.E.
SUPERINTENDING ENGINEER, V CIRCLE,

To
The Chief Engineer
P.W. Department.

Enclosures. 2

Sir,

In returning your Endorsement No 388 dated 9th July 1888, I have the honor to state that the General Superintendent P.W. Stores explains that the charges received from England for the drawings supplied amounted to £18-18-. which at one Shilling and Six pence per Rupee amounts to Rupees 252 odd to which is added a percentage of one per cent making the

the total of Rupees 254-8-4.

I have the honor to be
Sir
Your Most Obedient Servant

Hutchinson Sibley Coll. R.E.
Superint.g Engineer
5th Circle.

P. W. C. No. 8259

From

THE SUPERINTENDING ENGINEER,

V Circle,

To

THE Chief Engineer
P. W. Department.

Dated 21st July 1888.
Recd. 20 August
26

ENCLOSURES. 2

No. 2561 W d/ 20-8-88.

No. 1728

Drawings.

States that the General Superintendent P. W. Stores explains that the charges received from England for the — supplied amounts to £ 18-18-0

O.L.S. 147/VIII/88.
in 1078

W
Seen
[illegible]

(3)

C No. 6505

Dy: W.

The Supy: Engineer V- Circle requests sanction to the excess amount of Rs 223.6.3 on the Est: of Rupees 90 for the purchase of a machine for testing laterite blocks-

It is explained that the excess is due to charges ~~advised~~ by the Supdt: P.W. Stores Madras not included in Statement No 954 d/29th Septr: 1887-

5/7/88

Sanction

5.7.88

B/

1888.

P. W. DEPARTMENT.

Current No. 6505.

From The Supdg Engineer
IV Circle

ENCLOS.—

No. 273 E.W.
Dated 2nd July 1888.
Received 4. 7. 88

SUBJECT.

Machine for testing Laterite Blocks. West Coast Divn-

Requesting Sanction to the Excess of Rs 233.6.3 on the Sanctioned estimate for purchasing—

DISPOSAL.

No. 388 D Dated 9th July 1888

Referred to the Supdg Engineer V Circle in view to the General Superintendent Public Works Stores Explaining the heavy charges for drawings-

(Signed) J. Hasted Col R.E.
Secy to Govt P.W. Dept

To
The Supdg Engineer
V Circle
To be returned—

[illegible] desp 10/7