M.R.O. 1—77,000—6-4-51.

(1) Number of pages_____

(2) Date of repair_____

(3) Initials of the Reference_____

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 1666 Press / Misc.

Dated 4 - 6 1954.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 9th June 1864.

No. 201. Read the following Memorandum from the Superintending Engineer, 7th Division, to Colonel C. A. ORR, R. E., Secretary to Government, Department Public Works, dated Coimbatore, 27th May 1864, No. 12:—

Read the following letter from Lieutenant A. J. FILGATE, R. E., Acting Assistant Engineer, South Canara, to Lieutenant-Colonel G. W. WALKER, R. E., Superintending Engineer, 7th Division, dated Mangalore, 9th May 1864, No. 2.

SIR,

I have the honor to forward herewith Plans and Estimates for the Charmady and Chibbeddree bridges, and also for building supports, under the present timber truss bridge, across the Birchenhollay Nulla.

3 Plans.
3 Estimates.
3 Specifications.

1. An Estimate of Rupees 2,800 for the Charmady bridge.

This bridge was built last season at a cost of Rupees 1,147-5-3 on an Estimate of Rupees 1,450, out of the additional sanction of Rupees 2,335, given for the improvement of the Charmady Ghât.

It was built with rubble abutments 10 feet in height, but as these are now in complete ruins, I think it advisable to use laterite in the new bridge.

The floods last season were almost on a level with the top of the abutments, but in the accompanying Plan the road-way is 2 feet higher, and this with the two additional side spans of 10 feet each ought to allow ample water-way. The saving in last year's Estimate appears to have been caused by the substitution of rubble for laterite, and a fine of Rupees 50, which was imposed on the Contractor by the District Engineer.

2. The Chibbeddree bridge. The Estimate for this bridge amounts to Rupees 1,400.

An Estimate of Rupees 915 out of the additional sanction of Rupees 2,335 for the improvement of the Charmady Ghât for erecting a timber platform bridge was sent in last year, but as stone was procurable at a short distance from the site it was settled by the District Engineer that a masonry bridge should be substituted, but sufficient labor not being procurable the idea of building the bridge out of that sanction had to be abandoned.

3. The timber truss bridge across Birchenhollay river on the Munzerabad road having become a good deal shaken and bent, it is absolutely necessary for the safety of the structure that piers should be built to support it as shown in the accompanying Plan.

(True Copy.)
(Signed) G. W. WALKER, Lieut.-Colonel, R. E.,
Superintending Engineer, 7th Division.

Submitting for sanction three Plans and Estimates for bridge work, as per explanatory letter from Lieutenant Filgate accompanying:—

No. 1. Charmady bridge Rupees 2,800, called for in paragraph 4 of Government Order No. 2,419 of 25th August 1863.

No. 2. Chibbeddree bridge Rupees 1,400, on same line of road.

The above may be sanctioned for entry in the Budget of 1865-66; leave being given to undertake them in 1864-65 if it can be done without interfering with the progress of the four large bridges below Charmady Ghât, for which Rupees 17,420 are allowed in Budget of 1864-65 and if funds are available.

No. 3. Piers to support the trussed timber platform of Birchenhollay bridge below Munzerabad Ghât, Rupees 900.

Recommended for execution from Reserve Fund of 1864-65 provided the plaform lasts through the approaching monsoon. Inspected by Superintending Engineer in February last, and Estimate ordered to be prepared.

(Signed) G. W. WALKER, Lieut.-Colonel, R. E.,
Superintending Engineer, 7th Division.

Proceedings of the Madras Government, Public Works Department, 9th June 1864.

No. 202. ORDER THEREON, 9th June 1864, No. 1,686.

1. The Estimates submitted for the following works are sanctioned for entry in the Budget of 1865-66 as proposed :—

	Rs.
Charmady and Chibbeddree bridges	4,200

If it be practicable to commence these works in the current official year without interfering with the progress of the four large bridges under construction below the Charmady Ghât, the Superintending Engineer will be at liberty to put them in hand, notifying their commencement, and applying for the necessary funds.

2. Colonel Walker supports the application of Lieutenant Filgate to expend a sum of Rupees 900, in renewing the piers of the timber truss bridge across the Birchenhollay river on the Munzerabad road, provided even that the structure lasts through the approaching monsoon. The Government accede to this proposal and resolve to make the required grant from the Reserve.* A report on the condition of the bridge after the monsoon should be submitted for information.

* Under "Communications."

(True Extract.)

Signed) Charles A. Bird Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 7th Division.
" Controller and Auditor of Public Works Accounts.
" Accountant General.

Exd. S. T. Augustin.

Detailed Estimate No 9 1864/65 3
of Canara

Work. Constructing 2 Piers to support the Timber Truss Bridge across the Backenhollay Nullah on the Munzerabad Road

Particulars of work.	Measurements No.	Ft.	In.	No.	Contents
Foundation to Piers	26	4½	4	2	936
Piers above	21	3½	12	2	1764
					2700
Deduct for Cut granite facing					216
Laterite in chunam @ 90					2484
Cut granite facing to Cutwaters @ 90					216
Foundation & Casting Boulders Cyds					62
Pointing @ 90 per 100					1256

Pookoo Ranger Piers
& Cutwaters
Mangalore 9th May 1864

Alex. J. Filgate Lieut RE
Ag. Assist Engineer
& Canara

Abstract Estimate No 9 1864/65
Of Canara

Work. Constructing 2 Piers to support the Timber Truss Bridge across the Backenhollay Nullah on the Munzerabad Road

Quantity	Description of charges	Rate	Amount	Total
2484	Cft Laterite in chunam pointed @	22	546 7 8	
216	Ditto Cut granite @	1	216	
62	Cubic yards of blasting boulders imagined @	1	62	
1256	Sft of pointing @	1	12 8 10	
			837 15 8	
	Sundries & Superintendence		900	
	Total Estimate Rupees		900	

Pookoo Ranger Piers
& Cutwaters
Mangalore 9th May 64

Alex. J. Filgate Lieut RE
Ag. Assist Engineer
& Canara

Walker Lieut Col RE
Supt Engr 7th Div

Summary given for entry in Estimate

Detailed Estimate No 9 1864/65

5

Square 1

Works Constructing a Timber Bridge across Chamagua Stillage on the South Square District

Particulars of works	Measurements No.	Measurements Ft.	Measurements In.	No.	Contents
Excavation of Foundations to					
Abutments	21	6	3½	2	882
Piers	27	5½	3½	2	1039½
Wingwalls	16	4¾	3½	4	1064
Total Excavation agreed					110½
Filling in approaches do					240
Total Earthwork done					350½
Foundations to Abutments	20	5	3½	2	700
Ditto to Piers and Cutwaters	26	4½	3½	2	819
Ditto to wingwalls	16	3¾	3½	4	840
Abutments above	20	1	12	2	1920
Piers Ditto	18	3½	12	2	1512
Cutwaters Ditto	3⅛	2¼	12	4	330¾
Wingwalls Ditto	17	2¾	12	4	2380
Blocking Courses	20	1½	1½	4	180
Pardsplate	20	1	2	4	160
Total					8813¾
Deduct for Corners of Abut	1	½	12	4	24
Laterite in chunam of Ft					8817¾
Wood work					
Girder Beams	14½	8"	1'	12	116
Ditto	33	8"	1'	6	132
Sleepers	3'	8"	1'	12	24
Ditto	13'	8"	1'	12	104
Struts to Ditto	6½	8"	8"	24	69½
Joists	23	3"	4½	10	2875
Ditto	17	3"	4½	18	2833
Posts	3'	3"	4"	20	5

Abstract Estimate dt 18th May 65.

South Canara

Work to be Constructing a Timber Bridge across Channadys Nullah in the South Canara District

Quantity	Description of charges	Rate	Amount	Total
351½	Subscriptions of Earthwork P Cyard	3 -	65 11 6	
8817½	Collection of Laterite inclusive of Carriage per cft	20 -	1763 8 9	
600	Ditto of good junglewood per cft	1 4 -	750 - -	
153	Ditto of ditto Plantango ditto	1 8 -	232 8 -	
3532	Superficial of pointing per Sq.yd	1 - -	35 5 1	2847 1 4
	Sundries & Superintendence			272 14 8
				3120 - -
	Deduct value of old Timber			320 - -
	Net Amount of Estimate Rupees			2800 - -

Doctor Ranger Esqr
S. Canara
Mangalore 9th May 1865

Alex. J. Elgar Lieut. R.E.
Ag. Mountd. Engr
S. Canara

Walker Lieut. Col. R.E.
Supg. Engineer T. Dy

Particulars of work

Particulars of work	Measurement			Cubic Ft.
	Ft.	In.	Lines	
Struts & Posts				
Cap Rails	4½	3	4	66
Lower ditto	6	3	4	2
Wastage	6	3	4	4
				72½
Total junglewood cft				600
Plantango	6	17	4½	1553
Wastage				281½
Total junglewood cft				153
Pointing				
Abutments				
Piers	52	12	-	624
Intervals	86	12	-	1032
Corners of Abutment	33⅓	12	-	396
Rings	5⅓	12	-	64
Blocking Courses	80	12	-	960
Parapets	80	1½	-	120
	168	2	-	336
Total pointing Sq.yd				3532

Doctor Ranger Esqr
S. Canara
Mangalore 9th May 1865

Alex. J. Elgar Lieut. R.E.
Ag. Mountd. Engr
S. Canara

Detailed Estimate No 9 Rb/Ks

Fourth Lamura

Work. Constructing a Masonry Bridge of 21 feet span across the Chakridry Nullah on the Chamaraj Road.

Particulars of works.	Measurements Ks.	B.	2.	No.	Quantity
Foundation to Abutments	20	4½	4	2	720
Ditto to Wingwalls	16½	3½	3	1	346½
Abutments above	20	4½	3	2	540
Wingwalls Ditto	16½	3	12	4	2376
Ditto	18	2¼	4½	-	182¼
Face walls	42	2¼	2¼	-	212⅜
Backing to Arch	40	1	4½	-	180
Ditto	40	3½	2¼	-	315
Blocking Courses	126	2¼	1	-	283½
Parapets	126	1	2	-	252
			Superficial Feet		5528¼
Arch work in chunam	21	20	2	-	1260
Ditto	-	-	-	-	21
Centering	27	20	-	-	540
Blackening under the Arch	58	3	-	-	174
Abutments	66	12	-	-	792
Wingwalls	18	4½	-	-	81
Face walls	42	2¼	-	-	94½
Parapets	258	2	-	-	516
Backing to Arch	4	4½	-	-	18
Ditto	14	2¼	-	-	31½
Arch	31	2	-	-	62
			Superficial Feet Pointing		1769
Covering over the Arch with Cuttub jelly			Superficial Feet		420
Excavation			Cubic Yards		82
Filling in Approaches			"		111
			Total Earthwork Yards		193.

Pootah Tungee Pass
Godava
Mungalore 5th May 1865

Mr. J. Fitzpatrick Lieut. R.E.
Offg. Asst. Engr.
Godava

Abstract Estimate No 9 for 1864/65

South Canara

Work. Constructing a Masonry Bridge of 21 feet 5 spans over the Cheeriby Nullah on the Channady Road.

Quantity	Description of charges.	Rate	Amount	Total.
1122¼	Cubic yds Laterite in chunam for 100 cubic ft	16 " "	932 8 3	
1440	Cubic yds Arch work ditto ditto	19 " "	2359 7	
21	Superficial yds Centering per Superficial yd	3 " "	63 " "	
540	Superficial yds plastering per Sq yd	3 " "	16 3 2	
169	Cubic yds pointing ditto	1 " "	17 11 4	
420	Cubic yds Coursing over the Arch with Laterite jolly per Sq yd	3 " "	12 9 7	
193	Cubic yards of Earth work per cubic yard	3 " "	36 3 "	
	Sundries & Superintendence		86 3 5	1400 " "
	Total Estimate Rupees			1400 " "

Boat Bridge Cheeriby Nullah
Mangalore 9th May 64

Lieut. R.E.
Ag: Assist. Engineer
S. Canara

Lieut. Col. R.E.
Superintending Engineer

No. 2.

Cotton Range Office
South Canara
Mangalore, 9th May 1864.

To,
Lieut.t Colonel G. W. Walker, R.E.
Superintending Engineer 7th Division

Sir,

I have the honor to forward herewith Plans and Estimates for the Charmady and Chibidry Bridge, and also for building supports, under the present timber truss Bridge, accross the Bicherhalley nulla.

Encls. 9.
3 Plans
3 Estimates
3 Specifications

1. An Estimate of Rupees 2800 for the Charmady Bridge.—

This Bridge was built last season at a cost of Rupees 1470-5-3 on an Estimate of Rs. 1450, out of the additional Sanction of Rs. 2335 given for the improvement of the Charmady Ghaut

It was built with Rubble abutments 10 feet in height but as there are now in Complete ruin I think it advisable to use Laterite in the new Bridge—

The floods last season were almost on a level with the top of the abutments, but in the accompanying plan the roadway is two feet higher, and this with the two additional side spans of 10 feet each ought to allow ample waterway. The sum in last year's Estimate appears to have been caused by the substitution of Rubble, for Laterite and a fine of Rs. 50, which was imposed on the Contractor by the District Engineer.—

2. The Chibidry Bridge— The Estimate for this Bridge amounts to Rs. 1400.——

An Estimate of Rs. 915 out of the additional Sanction of Rs. 2335 for the improvement of the Charmady Ghaut for erecting a Timber Rail

-form Bridge was sent in last year. but as stone was procurable at a short distance from the Site it was settled by the District Engineer that a Masonry Bridge should be substituted - but sufficient labor not being procurable the idea of building the Bridge out of that sanction had to be abandoned -

3. The Timber Truss Bridge across Birchenbolley River on the Mungeraband Road having become a good deal shaken and bent, it is absolutely necessary for the safety of the structure that Piers should be built to support it as shewn in the accompanying plans. —

Sanctd.

Signed / A. J. Pilgate Lieut. R.E.
Offg. Asst. Engineer L. Canara

/ True copy /
Alexander Lieut Col R.E.
Supdg. Engr. 7. Dn.

No. 12.

Memo.

Submitting for sanction 3 Plans and Estimates for Bridge Work as per explanatory letter from Lieut. Pilgate accompanying: —

No. 1. Chamaly Bridge Rupees 2803. - Called for in para 4 of Government Order No. 2419 of 23rd August 1863. —

No. 2. Chibiddave Bridge - Rs. 1400. — on same line of Road. —

The above may be sanctioned for entry in the Budget of 1865-66; leave being given to undertake them in 1864-65 if it can be done without interfering with the progress of the 4 large Bridges below Chamaly Ghaut for which Rupees 17420 are allowed in Budget of 1864-65; and if funds are available. —

No. 3. Piers to support the Trussed Timber Platform of Birchenbolley Bridge below Mungeraband Ghaut. Rs. 900 —

Recommended for execution from Reserve Fund of 1864-65 provided the platform can be thoroughly the approaching Monsoon. Inspected by Superintending Engineer in February last & Estimate ordered to be prepared. —

Supdg. Engr's Office 7. Dn. } Alexander Lieut Col R.E.
Coimbatore 27. May 1864. } Supdg. Engineer 7. Dn.

To, The Secy. to Government P.W.D. Madras

1867. 2nd

Last brought the approaching
monsoon. The Government
acceede to this proposal
and resolve to meet the
required grant from
the Reserve. A report
on the condition of the
Bridge after the mon-
-soon should be sub-
-mitted for information.

Chepauk 22
9th June 1866

The Supt Engr 1st Circle
Centre & Hd Qrs Districts
Secy to Govt
Desp 16th June

X87
Cir 6th June 1866 B. 73

Copy
Sec to Govt
Madras

Dated 27th May 1866
Rec'd 8th June

No 12.
Circle J.
Forwarding Chairnady
Chithidy and Vaireharbole
Bridge Estimates Rs 2800
1400 and 900 respectively
for Sanction.—

No 1686 - 9th June 1866 -

With an Order

No. 1686.

The Estimates submitted
for the following works are sanctioned for entry
in the Budget of 1867-68 as proposed.

and Chithidy Bridge Rs 2800.
Chairnady Bridges — Rs 1400
Do 900

If it be practicable to commence these
works in the current Official year with-
-out interfering with the progress of
the four large Bridges under con-
-struction below the Chairnady Bath,
the Superintending Engineer will be at
liberty to put them in hand, notifying
their commencement, and applying for
the necessary funds.

Colonel Hacker supports the
application of Lieutenant Tilyard to sp-
-end a sum of Rupees 900. in repairing
the Piers of the Timber truss Bridge across
the Buckenhilly River on the Chungrabad
road, provided that the structure
secures