M.R.O. 1—77,000—8-5-37.

(1) Number of pages 10

(2) Date of repair 11-2-43

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2416 Press Mis.-

143-144

Dated 10-10-1862.

Not to be folded or roughly handled

95

Proceedings of the Madras Government, Public Works Department, 10*th October* 1862.

No. 143. Read the following letter from Lieutenant-Colonel J. OUCHTERLONY, R. E., Deputy Chief Engineer, Southern Circle, to Colonel W. I. BIRDWOOD, R. E., Secretary to Government, Public Works Department, dated Madras, 23rd September 1862, No. 182 :—

SIR,

3 Letters from the District Engineer, Nos. 451, 237 and 244, dated 12th December 1861, and 15th and 18th September 1862.
1 Plan.
1 Specification.
1 Abstract Estimate.

1. I have the honor to submit herewith an estimate amounting to Rupees 6,300 for completing the Veylanthavalum bridge in the District of Coimbatore, and I beg leave to recommend it for early sanction out of the General Funds at the disposal of the District Engineer, in order that arrangements may be made so as to ensure the completion of the entire work in the ensuing fair season.

G. O. No. 116, dated 25th January 1856.
" " 935, dated 5th May 1860.

2. The subject of the Veylanthavalum bridge has been so frequently brought before Government (*vide* margin) that it will be only necessary on this occasion to submit a brief *resumé* of what has occurred in connection with the work.

* Half to be paid by the Cochin Circar.

3. It was originally sanctioned on an estimate of Rupees 5,140* (on rates far below what they are now) in G. O. No. 116, dated 25th January 1856. Owing to financial difficulties its execution was delayed until, in 1860, it approached completion ; when, owing to most culpable mismanagement, the main arch of 50 feet span crushed in its insufficient centring, and fell, causing the death of four persons and injury to seven others. The substitution of a timber truss in lieu of masonry for the arch was then suggested and approved of by Government in G. O. No. 935, dated 5th May 1860. For the delay which has since ensued in moving in this matter, it seems necessary to say, I am not responsible ; and the only explanation of it which I can give is that much time was consumed in agitating the question as to the choice between timber and masonry in completing the work. The objections to the use of the former material are chiefly the difficulty of getting good carpenters to remain at work in a jungly feverish place like Veylanthavalum ; the greater expense of teak, and the incongruity of introducing a timber platform in the middle of a massive masonry structure. After due consideration and enquiry, I am disposed to give the preference to brick ; resting in this decision mainly upon the assurance of the present experienced District Engineer that the clay of Veylanthavalum is by no means ill-adapted for the manufacture. At the same time I am bound to point out that Captain Goddard in a letter dated 13th December 1861, No. 451 (enclosed), expresses an opinion that " no bricks " in Coimbatore that he has seen are fit to turn an arch of 50 feet span."

4. As Colonel Faber has had, I believe, more experience of bridge building than any Officer now in the Department, Government will no doubt approve of my preferring to be guided by his opinion on this point ; though at the same time I shall consider it my duty to make a personal investigation of it on the earliest occasion which I can command.

5. The former arch, it will be observed, fell not through inefficiency of material, but through weakness and error in the construction of the centring. A sufficient sum has now been allowed in the estimate to admit of the pillar supports being built with chunam instead of clay ; and they will be allowed to settle thoroughly before the arch is turned over them.

6. I need scarcely add that the communication which the Veylanthavalum bridge is destined to establish between the Cochin States and the territory of the British Government, is very greatly needed.

Proceedings of the Madras Government, Public Works Department, 10th October 1862.

No. 144. ORDER THEREON, 10th October 1862, No. 2,416.

1. Under the explanation afforded in the foregoing letter, the Government sanction, out of the General Funds at the disposal of the District Engineer, Coimbatore, the estimate of Rupees 6,300 for completing the Veylanthavalum bridge.

2. The Government have in a separate Order permitted Colonel Ouchterlony to proceed to Coimbatore at the earliest opportunity for the purpose of inspecting the above work as well as certain others. They trust that every precaution will be taken to prevent the recurrence of such disasters as have heretofore attended the construction of the work, and they request that Colonel Faber will inspect the same frequently.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

PUBLIC (ROADS)

ABSTRACT of Estimate No. of 186 .

ROAD No.

DISTRICT Coimbatore

WORK Completing the Valantavalum Bridge on the Cross road from Coimbatore to the Cochin Territory.

Quantities.	Description of Work.	Rate. Rs.	A.	P.	Amount. Rupees.	Amount of each part. Rupees.
397	Cyds Brick in Chunam @ 6	5	-	-	1985	
134½	Do Arch work in Do Do	7	-	-	939	
14337	Sq.ft Plastering with 2 Coats of Chunam @ ¾	-	13	4	693	
1573	Cyds Rough Stone in Mud for Revetment @ 6	1	2	8	97	
65	Do Do Do for facing	1	3	8	76	
	Centring for the Semi Arch	-	-	-	800	
	Filling with earth over the arches	-	-	-	50	
4	Guard Stones	6	2	-	8	
						4648
	Forming approaches turning one Mile of Road and Metalling Do					
3520	Cyds Cutting Side Drain & forming approaches & Road	-	1	6	330	
2640	Do Metalling with Jelly	-	4	-	660	
	Carried Over				990	4648

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5 VI

Quantities.	Description of Work.	Rate. Rs.	A.	P.	Amount. Rupees.	Amount of each part. Rupees.
	Brought Over				990	4,648
	Clearing Jungle for a distance of One Mile	"	"	"	110	
						1100
	Contingencies & Sundries	"	"	"		552
					Total Rupees	6,300

Southern Circle Office
Madras 23rd Sept. 1862

Executive Engineer
Southern Division
2nd Class Engineer S. C.

Southern Circle Office 8th
Madras 23d Sept 1862

No 182

7 N.

From Lieutenant Colonel J. Ouchterlony R.E.
Deputy Chief Engineer &c.

To Colonel R. A. Birdwood R.E.
Secretary to Government P.W.D.

Public
No 830.
Rec.d
Sir,

I have the honor to submit herewith an Estimate amounting to —— Rs. 6300. for completing the Valunthavalum Bridge in the District of Coimbatore, & beg leave to recommend it for early sanction out of the General Funds at the disposal of the Dr. Engineer, in order that arrangements may be made so as to ensure the completion of the entire work in the ensuing fair season.

2. The subject of the Valunthavalum Bridge has been so frequently brought before Govt. (vide margin) that it will be only necessary on this occasion to submit a brief resumé of what has occurred in connection with the work.

3. It was originally sanctioned on an Estimate of Rs. 5140* (on rates far below what they are now) in G.O. No. 116 of 25th Janry. 1856. Owing to financial difficulties its execution was delayed until, in 1860, it approached completion; when, owing to most culpable mismanagement, the

G.O. No. 116, of 25th Janry. 1856.
" " 935 of 5th May 1860.

* half to be paid by the Cochin circar.

Enclosures
As per Letter
From
The Dy. Chief Engineers
Southern Circle
To
The Secretary to Govt.
P.W.D.
Dated 23rd Sept. 1862
Received 30th Sept. 1862

No 182

Estimate & Statements for completing the Valunthavalum Bridge on the Road from Coimbatore to the Cochin Frontier in the District of Coimbatore.

Amounting to Rs. 6300.

main arch of 50 feet span crushed in its insufficient centring, fell, causing the death of 4 persons owing to 7 others. The substitution of a timber truss in lieu of masonry for the arch was then suggested & approved by Govt in Mily. O. No 935 of 5th May 1860. For the delay which has since ensued in moving in this matter it seems necessary to say I am not responsible; the only explanation of it which I can give is that much time was consumed in negotiating the question as to the choice between timber & masonry in completing the work. The objections to the use of the former material are chiefly the difficulty of getting good Carpenters to remain at work in a jungly feverish place like Calumtavalum; the greater expence of both, & the impropriety of introducing a timber platform in the middle of a massive masonry structure. After due consideration keeping I am disposed to give the preference to brick; resting in this decision mainly upon the assurance of the present experienced Executive Engineer that the clay of Calumtavalum is by no means ill adapted for the manufacture.

At the same time I am bound to point out that Capt. Goddard in a letter dated 13th Dec. 1861, (enclosed) expresses an opinion that "no bricks in Coimbatore that he has seen are fit to turn an arch of 50 feet span". No. 457

4. As Colonel Faber has had, I believe, more experience of bridge building than any Officer now in the Dept., Govt will no doubt approve of my preferring to be guided by his opinion on this point; tho' at the same time I shall consider it my duty to make a personal investigation of it on the earliest occasion which I can command.

5. The former arch, it will be observed, fell not thro' insufficiency of material, but thro' weakness & error in the construction of the centring. A sufficient sum has now been allowed in the estimate to admit of the pillar supports being built with chunam instead of clay; & they will be allowed to settle thoroughly before the arch is turned over them.

6. I need scarcely add that the communication which the balantravalum Bridge is destined to establish between the Cochin State & the territory of the British Govt is very greatly needed.

I have &c

H. Chesterton Lieut
Dy. Ch. Engr Do-6

To Colonel R. J. Benwood R.E.
Secy to Govt PWD
Madras

5th January 1850 - Art 15 to 46.
5th May — 1860 — 80-81.

Vide Chief Engr. Letter of 31st October 1862 Encl. 3 Sheets

Vide Chief Engr. Letter of 4th October 1862 Encl. 3 Sheets

Nos. 1483 - 144

4th October 62

Vide Chief Engr. Letter of 4th October 1862 Encl. 3 Sheets

No. 2901

Vide Lt. Col. J. Cuchterlony 15th Bengal Engrs. Letter dated 10th October 1862 No. 2416

Vide Lt. Col. H. T. Brabazon 18th Bengal Pioneers Letter dated 10th October 1862 No. 2416

Rec'd 23rd Oct. 1862

Read 27th Oct. 1862

Ene. 6.

No. 182.

Submitted for sanction a Plan & Estimate amounting to Rs 6300 for completing the Vaigai Anicut River in the District of Coimbatore, & explaining the reasons which led to the delay in the commencement of the work.

No. 2416 - 10th October.

William Arden

No. 2416.

Under the explanation afforded in the foregoing letter, the Govt. sanction out of the general funds at the disposal of the District Engineer Coimbatore, the Estimate of Rupees 6,300 for completing the Vaigai Anicut Bridge.

The Govt. have in a separate order permitted Colonel Cuchterlony to proceed to Coimbatore at the earliest opportunity for the purpose of inspecting the above work as well as certain others. They trust that every precaution will be taken to prevent the occurrence of such disasters as have heretofore attended the construction of the works, and they request that Colonel Haldane will ~~[illegible]~~ inspect the same ~~[illegible]~~ frequently ~~[illegible]~~ during ~~[illegible]~~.

Copies
The Chief Engr. & Secretary with Encls. Dispatched 11th
Chief Engr. 3. Accountant General. Despatch 10th October 62.