

- (1) பக்கங்களின் எண்ணிக்கை 14
 (2) புதுக்கித் திருப்பிய நாள் 9.90.
 (3) ஆதாரங்குறிப்பவர் சுருக்கொப்பம் long

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

PWD துறை

12

அரசாணை எண். மு. கோப்புத் தாள் எண்.	446	அச்சகம் பலவகை
நாள் : 12-2-1892		198.

மடிக்கவோ கண்டபடி கையாளவோ கூடாது

7 Sheet

12TH FEBRUARY 1892, No. 446 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From Lieut.-Colonel R. R. E. DRAKE-BROCKMAN, R.E., Superintending Engineer, IV Circle, to the Chief Engineer, Public Works Department, dated 20th January 1892, No. 40 W.

Adverting to G.O., No. 3116 W., dated 19th November 1891, I have the honour to submit, for sanction of Government, plans and estimates, accompanied by a report, aggregating to Rs. 44,200, for constructing two iron girder bridges—(1) of 100 feet span over the Kullar river (Rs. 28,600) and (2) of 80 feet span over the Burliar river (Rs. 15,600), with a roadway 15 feet wide.

2. The estimate for Kullar bridge work provides, with the concurrence of the Chief Engineer for Irrigation, for constructing a long training wall in the right bank, down stream, of the river-bed, in order to restore the head of the Odanthorai irrigation channel, the cost of which amounts to Rs. 4,750.

3. The proposed total outlay for these two bridges *minus* cost of training wall in connection with the Odanthorai channel will be Rs. (28,600—4,750 + 15,600) 39,450.

ORDER—dated 12th February 1892, No. 446 W., Public Works.

The undermentioned estimates in connection with the restoration of the Coonoor ghât road are sanctioned :—

Provincial.
Communications.
Original Works.

- | | Rs. |
|---|---------------------------------|
| (1) Constructing an iron girder bridge ... on the Kullar river. | 28,600 (No. 111 W. of 1891-92). |
| (2) Do. on the Burliar river ... | 15,600 (No. 112 W. of 1891-92). |

2. In G.O., No. 212 W., dated 21st January 1892, a sum of Rs. 20,000 was allotted for the two bridges. The Superintending Engineer, IV Circle, will report whether any additional grant is necessary for expenditure during the current official year.

(True Extract.)

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

To the Superintending Engineer, IV Circle, with 10 enclosures.
" Examiner, Public Works Accounts.
" Local and Municipal Department.

Exd. A. D. Xavier.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1892} Madras.
PUBLIC WORKS.

ated February, 12th.

ed.

Encl.

.O., 12th Feb. 1892, No. 446 W.

FEBRUARY.

Coonoor Ghat Road, Nilgiri
District

Estimates, amounting, respectively, to
Rs. 28,600 and Rs. 15,600 for constructing
iron girder bridges on the Kullar and Bur-
liar rivers in connection with the restora-
tion of the —, sanctioned.

Public Works Department.

Current No.

647

446 W

Letter No.

40 W

Dated

20th January 1891

From the

Super Engineer W. C. C. C.

Sanctioned over

TECHNICAL NOTE. S-2-52

With reference to G.O. No. 3116 W
dated 19th November 1891, the Super
Engineer, W. C. C. C., submits for
the sanction of Govt. plans &
estimates amounting in all
to Rs. 44,200 for constructing
two iron girder bridges, one
of 100 feet span over the Kullar
river and the other of 80
ft span over the Barlizar
river.

The necessity for these
bridges are further explained
in the report accompanying
the estimates.

Kullar bridge - This bridge
is proposed to be built of one
clear span of 100 feet and
built square to the stream at
the site of the old bridge

of 3 spans of 25 ft. each. The wings are designed something like those of a Head Stream. It is stated in the report that this design has been approved by the Chief Engr.

The foundations of the abutments & wings are proposed to be carried down 3 feet to bed of gravel and the superstructure: three walls of curved rubble in mortar picked with rustic work, as per plan, for the parapets, pilasters &c. The girders to be constructed on the Whipple-Dunphy system with wooden flooring for the roadway, no joists are provided but all planking, the lower planking to be $4\frac{1}{2}$ " thick for a width of 16 feet & the upper planking 1" thick for a width of 15 ft. with side wheel guard blocks 6" x 9". The width of the roadway proposed being 15 feet. From the plan it would appear that the width of the girders from outer to outer of flange is 20 ft.

Sept 3

20 ft. hence it is thought that the position of the main girders may be altered & brought nearer to suit the planking of 16 feet wide.

a training wall is proposed to be built with the approval of the Chief Engineer for Irrigation for the Odanthorai channel, as the irrigation channel suffered owing to the obstruction caused to the old bridge.

Barliger bridge - This bridge is proposed to be built of one clear span of 80 ft. & is to be built on solid rock at the site of the old bridge which was of 3 bays of 19 feet each. The particulars of construction of this bridge is similar to that of Kullar bridge. The main girders in this bridge are placed 19'6" from outer to outer of flange & the planking is estimated at 16 feet wide, to give a roadway of 15 feet, the girders may be removed a little closer as to give a bearing for the roadway planks.

planting.
 In the report it is stated that
 the designs & calculations for
 the iron girders have been ap-
 proved by the Chief Engineer &
 that the iron work is in hand
 by Messrs. Richardson & Cundden
 of Bombay.

The rates appear to be very
 low especially for the Barliya
 bridge which is situated in
 a very unhealthy locality,
 but in para 26 of the report it
 is stated that a contractor has
 agreed to undertake the work
 at estimated rates.

Barliya bridge was only
 recently reconstructed in 86-7
 at a cost of about 5000 Rs. a
 large quantity of cut stone for
 the parapets &c. must be avail-
 able & for which no credit
 is given in the estimate.

The estimate provides for the
 following:-
 Kullar bridge & training wall Rs 28600
 Girders 105 ft complete 10700
 Carriage to site 160
 Section & fitting charges 1500.
 Barliya bridge 15600
 Girders 85 ft complete 7900
 Carriage to site 160
 Fitting & erection charges 1100.
 The

The details have been checked
 by the estimate & plans com-
 missioner by the Super Insp. IV
 Circle.

Ths.
 3-11-92

No 40
 W
 Supg. Engineer's Office, IV Circle,
 20th January 1892.

From
 Lt Col. P. R. E. Drake-Brockman R.E.,
 Superintending Engineer,
 Fourth Circle.
 To
 The Chief Engineer,
 P. W. Department.

Referring to G.O. No 3116 W dated
 19th November 1891 I have the honor to
 submit for sanction of Government plans
 and estimates, accompanied by a report,
 aggregating to Rs 44,200 for constructing
 two iron girder bridges; (1) of 100 feet
 span over the Kullar river (Rs 28600)
 and (2) of 80 ft span over the Barliya
 railway parallel river (Rs 15600) with a roadway 15 feet wide.

2. The estimate for Kullar bridge
 work provides with the concurrence of the
 Chief Engineer for Irrigation, for construct-
 ing a long training wall in the right
 bank, down stream, of the river bed
 in

- Enclosures.
- 2 Estimates
- 1 Report
- 2 Plans of bridges
- 2 Site plans
- 1 Diagram of stream.
- will follow.
- sent as per railway parallel river

in order to restore the head of the Odan-
-thorai Irrigation Channel, the cost of
which amounts to Rs 4,750.

3. The proposed total outlay
for these two bridges minus cost of
training wall in connection with the
Odanthorai Channel will be Rs $(28,000 -$
 $4,750) + 15,600 = 39,450$.

I have the honor to be,

Sir,

Your most obedt^t serv^t,

Ruedrah - Bhichmar, Lt Col. R.E.,
Superintending Engineer, IV Circle.

448/4

P. W. CURRENT No. 647
From

The Supg. Engrs.
S. Circle

No. 2861 W of 28-10-91 incl
" 4970 C - 11-11-91
" 2952 W - 4-11-91
" 4640 C - 22-10-91
" 4739 C - 27-10-91
" 3116 W - 19-11-91
" 2977 W - 7-11-91
" 212 W - 21-1-92

Dated 20 } Jan/92
Despd 21st }

No 40
W

Encls 8

Kullar & Burchat
bridges

Submitting for sanc-
tion plans & estimates
amounting to Rs. 44,200
for erecting the —

22-1-92
Summ 27-1-92

PROCEEDINGS OF THE MADRAS GOVERNMENT.

No. 446 W of 12th Feb 1892
From the S.E. IV Circle No. 40 W of 20th January 1892.

The undermentioned
estimates in connection
with the restoration of
the Coonoor Ghat road, are
sanctioned:—

14/1
12 Feb

Provincial,
Communications,
Original Works.

1. Constructing an iron
girder bridge on the
Kullar river — Rs. 28,600 — No. 111 W of 1891-92
2. — Do — Do —
on the Burchat river — 15,600 — No. 112 W of 1891-92

2. In G.O. No. 212 W of 21 Jan. 1892,
a sum of Rs. 20,000 was allotted
for the two bridges. The
Supg. Engr. IV Circle will
report whether any additional
grant is necessary for
expenditure during the current
official year.

To The S.E. IV Circle
with 10 encls.
" Exar. P. W. Circle.
" L. & M. Dept.

R.S. D. 11-1-92

10-2-92

Handwritten mark

$\frac{446}{7}$

$\frac{7}{1}$ *Handwritten marks*

92 R12-2-92

C No 647
Govt. of 1892 Madras.
PUBLIC WORKS.

13/2

12 February 1892 No 4467

Coimbatore District Road,
Nilgiri Dt.

Estimates amounting
respectively to Rs 28,600
and Rs 15,600 for constructing
iron girder bridges on the
Kullar and Barlian rivers
in connection with the
restoration of the ———,
sanctioned.

(7)

80/4

13/2

7c 13/2