

(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. 689	Press Mis. —
197-98	
Dated 8 3	18 71 .

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
8th March 1871.*

No. 197. Read the following letter from the Acting Superintending Engineer, 7th Division, to the Secretary to Government, Public Works Department, dated Camp at Moodbidry, 20th January 1871, No. 217 :—

With reference to G. O., No. 2,191, dated 12th September 1870, I have the

honour to report that the Nellyady and Boodolly streams are insignificant ones, in which the water never rises to any great height, and that their beds under

the bridges show no signs of scour, the water-way provided being more than sufficient. The Range Officer informs me that the elliptical arches of these bridges cracked considerably, and commenced sinking at their crown shortly after they were built many years ago, and they had sunk upwards of a foot before they finally collapsed, which I attribute to laterite being so treacherous a material as to be unfit for the construction of elliptical or segmental arches.

2. I inspected the Boodolly bridge, and am convinced as to the sufficiency of water-way, which the Range Officer states is also the case at Nellyady. The laterite appeared to be of the average quality, and the mortar very fair. The cause of the Range Officer having estimated for rebuilding the piers and abutments is that the existing work shows signs of being much shaken. He considers it the safest plan to pull down and rebuild them, in which opinion I concur. As iron girders could not be obtained at as cheap a rate as that at which the semi-circular arches now proposed can be built, I recommend the plans and estimates now submitted may receive the sanction of Government and be provided with funds from the Reserve of 1871-72.

No. 198. ORDER THEREON, 8th March 1871, No. 689.

CIVIL WORKS, No. 6.

As it appears that the failure of the Nellyady and Boodolly bridges is attributable to the treacherous nature of laterite, and as there would appear to be no certainty of that material being trustworthy even for the semi-circular arches with which it is proposed to rebuild the bridges, His Excellency the Governor in Council is of opinion that it will be advisable, even at a somewhat additional cost if necessary, to substitute light iron girders for arches.

2. With this view estimates of the cost of suitable lattice girders have been obtained from the Public Works Workshops, and as these, with the requisite cross girders formed of angle iron, according to a working drawing which will be forwarded to the Superintending Engineer on application to the Workshops, can be supplied at a cost of Rupees 2,500, and Rupees 1,036, respectively, His Excellency in Council is disposed to think that their adoption will not entail any great excess charge and will be attended with many advantages.

3. The plans and estimates which accompanied the Acting Superintending Engineer's letter of the 20th January 1871, No. 217, will accordingly be returned

Proceedings of the Madras Government, Public Works Department,
8th March 1871.

with a view to the question of the adoption of such girders as are shown in the accompanying sketches being considered, and, if approved, to the submission of the necessary estimates.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Acting Superintending Engineer, 7th Division.
,, General Superintendent of Public Works Stores and Workshops.

Exd. E. C. Shooker.

No. 217

Super Engineer's Office,
7th Division,
Camp Moodbidry 20th Jan'y/71

From,

Lieut Colonel W. Farewell R.E.
By Super Engineer
7th Div

To,

The Secretary to Government,
D. P. Works
Madras

Sir,

Enclosures

2 Plans
2 Estimates Nos.

546. Rs 1710
83000 res=
-pectively

With reference to G.O. No. 2191 dated 12th September 1870 I have the honor to report that the Nellyady & Boodolly Streams are insignificant ones in which the water never rises to any great height and that their beds under the Bridges show no signs of scour, the waterway provided being more than sufficient. The Range Officer informs me that the Elliptical Arches of these Bridges cracked considerably & commenced sinking at their Crown shortly after they were built many years ago and they had sunk upwards of a foot, before they finally collapsed

Collapsed, which I attribute to
laterite being so treacherous a
material as to be unfit for the
Construction of elliptical or segmental
Arches.

2 I inspected the Boordully
Bridge and am convinced as to
the sufficiency of waterway which
the Range Officer states is also the
case at Mallyady - The laterite ap-
peared to be of the average quality
and the mortar very fair - The
Cause of the Range Officer having
estimated for rebuilding the piers
& abutments is that the existing
work shows signs of being much
shaken - He considers it the safest
plan to pull down & rebuild them
in which opinion I concur - As
Iron Girders could not be obtained
at as cheap a rate as that at
which the semicircular arches
now proposed can be built,
I recommend the Plans & Estimates
now

C/ 197
25th Dec 1902

C. 40 P W Dept
No 68989

10

Proceedings of the Madras Government
Under date the 8th ^{March} February 1871

Read the following

Post 187/dlight
No 389

From the Supg Engineer
7th Div

To the Secretary to Govt
S. M. Madras

Dated 20th
27th Jan'y 1871

Enclosures 4
No 217

Submit Plans &
Estimates of recon-
structing Kellyady
& Boddally Bridges
for sanction.

No 689 - 6 March 1871

From the Supg Engineer } H E No 217 & 20 Jan'y 1871
7th Division

As it appears that
the failure of the Kellyady
and Boddally Bridges is
attributable to the treacherous
nature of laterite and as
there would appear to be
no certainty of that material
being trustworthy even for
the semicircular arches
with which it is proposed
to rebuild the bridges, His
Excellency the Governor
in Council is of opinion
that it will be advisable,

even at a somewhat additional cost if necessary, to substitute light iron girders for arches.

With this view estimates of the cost of suitable lattice girders have been obtained from the Public Works Workshops, and as these, with the requisite cross girders formed of angle iron, according to a working drawing which will be forwarded to the Insp. Eng. on application to the Workshops, can be supplied at a cost of Rs. 2500, and Rs 1036, respectively,

98
His Excellency in Council is disposed to think that their adoption will not entail any great excess charge and will be attended with many advantages.

The plans and estimates which accompanied the Acting Insp. Engineer's letter of the 20th Jan'y 71, No 217, will accordingly be returned with a view to the question of the adoption of such girders as are shown in the accompanying sketches being considered, and, if approved, to the submission of the necessary estimates.

To Insp. Eng. - 7th Divⁿ - in the form of a
Genl. Insp. of Mr. H. R. R. ✓

Despo 9/3/71

W. H. B.

No 209.
Govt. of 1871 Madras.

PUBLIC WORKS.

To the Superintending Engineer
7th Division

Dated ..

Recd.

Encl.

G. O. S. No. 654.

Nos. 147-148

Order of the Government
in the Public Works Department
in relation to the
proposed 12 mile
plus 25 minutes or more
between the village of
Kandamangudi and the
village of ..