

(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.	286. (9)	Press
B.P. No.		Mis.
Dated	5 - 2 -	1874 195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
5th February 1874.*

No. 105. Read the following letter from Captain J. PENNYCUICK, R.E., District Engineer, North Arcot, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Camp at Tritany, 10th December 1873, No. 2,840:—

I HAVE the honour to report the partial destruction of the bridge known as "St. Andrew's" over the Govindavady channel from the Palar anicut, on the

One Sketch.

58th mile of the Western Trunk Road, and to request instructions as to the head to which the cost of renewing it should be charged.

2. The bridge consisted of a centre span of 30 feet and two side spans of 15 feet each, with piers of 5 feet, the arches being segmental with a rise of one-fourth the span.

3. The western, or left abutment, arch, and pier seem to be perfectly sound, and so, as far as can be judged at present, is the eastern abutment; the eastern pier has fallen and carried with it the eastern and central arches.

4. The exact nature of the movement that has taken place cannot be ascertained at present, nor is it a matter of much consequence, as the cause of the accident is self-evident.

5. The bridge stands in a somewhat sharp bend, the salient of which is to the east. The western arch is silted up to above the springing line, and it may be taken for granted that there has been a corresponding scour towards the eastern bank, which has caused the fall of the pier.

6. The bridge has been in existence for thirty years, and at the time it fell there was a full, but not an excessive supply passing down the channel.

7. The locality, although on a Trunk Road, is close to the boundary of the district, and not on the way to any work of importance, so that it is one not likely to be often inspected by any superior officer of the department; but I cannot help thinking that the Range Officer ought to have noticed the extraordinary way in which the left arch was silted up, which is so striking as to be noticeable on the most casual inspection.

8. In order to reconstruct the bridge, I propose to turn a single segmental arch of 50 feet span and 10 feet rise from the western pier to the eastern abutment, so as to avoid the necessity of removing and re-building the fallen pier; the radius of curvature of such an arch will be only $36\frac{1}{2}$ feet, corresponding to a semi-circular arch of $72\frac{1}{2}$ feet span, while the rise will be only $2\frac{1}{2}$ feet more than that of the former central arch.

9. A small groyne run out from the right bank a little way above the bridge will give the protection required by the right abutment. The enclosed sketch shows the extent of the injury.

10. The cost of restoration I estimate approximately at Rupees 1,200, and the Collector has requested me to refer to Government the question of the funds to which this expenditure should be charged.

11. Mr. Whiteside considers that the Government will undertake the work under the terms of G. O., No. 1,127,*

* Revenue Department.

of 18th October 1873, but that order appears to me to acknowledge liability only for the provision, in the first instance,

is one that may fairly be undertaken by
Government.

13. I shall be glad to receive instructions
upon this point as soon as possible, as the
road is too important to be left with an unbridged
channel.

I have the honor to be
Sir,
Your most obedient servant.
J. B. B. Capt. R. L.
District Engr. N. West.

2781.78.9

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P.W. 1873 Depart.
Dy. of Govt. of Madras
From No. 6724.
The District Engineer
North Arcot

To The Secretary to Govt.
Pub Works Dept.
Madras.

Dated 10th
Recd 12th } December 1873.

No. 2840

Enclosure one

Reporting the partial
destruction of the Bridge
"St. Andrews" over the Govin
"dandy" Channel from the
Palan Aicut, and request-
ing instructions as to the head
to which the cost of renewing
it should be charged.

No. 286. 5th Feb/74.

Ap 105
Cir 8 Jan/74 R. 15
Cir 20 Dec/73

9
His Excellency the Governor in Council
accepts the conclusion drawn in the
12th para: of the District Engineer's letter,
and directs that the reconstruction of
the Bridge be carried out from Imperial
Funds, the cost being met from the
Agricultural repair grant.

2nd & 3rd para: as before drafted.

By. 27/12/73

B. No. Sept 11

Pro: of the Madras Government

Read the following:-

From

The St. Engineer's Report - (H. E. No 2840 of 10 Dec 1913)

That the Engineer's report to the conclusion
drawn in the 12th Division of the District
Engineer's Report, recommends that the
reconstruction of the bridge be con-
sidered as a project of importance and
from the District

than we don't let the
charge can not be known.
on local funds. The care
lessness of the officers must
be severely noticed

23/12 1912
24/12

Engineer's report it would
appear that the fall of the
bridge over the Govindavady
channel in the 58th mile of the
Western trunk road was
not caused by an excessive
supply of water in the channel,
but from inattention to its
circumstances and condition.
It would further appear
to be probable that the bridge
was constructed as a part
of

of the Trunk Road and
belonged to the latter rather
than to the channel. Under
these circumstances the
Government are not prepared
to sanction its reconstruc-
tion from Imperial funds.

2. The neglect of the Range
officer to examine the
state of the bridge, and to
provide a remedy for the
set which could not appar-
-ently have been a sudden
danger, but one on the other
hand of probably some
years standing, requires
more explanation than
it has yet received, and
this should be obtained
and submitted. All masonry
works

13
works, whether on Roads or
Canals, require periodical
examination, and Range
officers must be held
responsible that this is
duly carried out.

3. Without the plan of the
bridge as constructed
it is not practicable to
decide whether the proposal
to turn one arch of 50 feet
span in place of the two
fallen arches would be
safe, but prima facie it
would seem to be improbable
that the abutment is suffi-
-ciently thick to stand the
thrust.

W. J. P. 1875
W. J. P.



P. W. Alph. Govt
 No. 286 18

Proceedings of the Madras Govt.

Read the following:-

from the District Engineer,
 North Arcot. (H. No. 2840 of 10 Decr/73)

His Excellency
 the Governor in Council
 accepts the conclusion
 drawn in the 12th para:
 of the District Engineer's
 letter, and directs
 that the reconstruction
 of the bridge be carried
 out from Imperial
 Funds, the cost being
 met from the Agri-
 cultural Repair Grant.

The

Md
 16/11

Respectfully submitted
 P. W. Alph. Govt

Done by
 J. W. Alph. Govt

Done by the District Engineer
 North Arcot. 16/11

27/12

10/10/73

2. The neglect of the
Range Officer to examine
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C.M.W.

To The Dir. Engr. & Architect
" Ch. Engr. for Irr.
" I. Engr. for Ports & Canals
" Rev. Secy.

Despatch 6/2/74

C/6724
Govt. of 1874 Madras.

PUBLIC WORKS.

To The District Commr
North Arcot

Dated

Recd.

Encl. /

G. O. 5th Feb^{ry} 74, No. 286.

✓
Nos. 105 & 106

St. Andrews Bridge over the
Govindasamy Channel,
North Arcot Dist. - Passing
orders on letter from the Dist.
Engr. reporting the partial
destruction of the bridge
& requesting instructions
as to its reconstruction.

(7)