M.R.O. 1—77,000—8-9-37.

(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. 2760 Press Mis.—

576 576

Dated 24. 9. 1867.

Not to be folded or roughly handled

84/53

No. 575. Read the following letter from the Superintending Engineer, 6th Division, to the Secretary to Government, Department Public Works, dated Myaveram, 13th September 1867, No. 879 :—

1. I have the honor to inform you that soon after the despatch of letter* No. 791, of the 21st ultimo, I was informed that five stones had been removed from the floor of the old apron of the south branch of the lower anicut, opposite the 3rd arch of the 2nd section of the bridge or the 10th arch from the south end. A few inches of water were then passing over the anicut, this was got rid of by opening the sluices in the north branch, and when the spot was examined by Mr. Bateman he found that not only the stones, but the masonry under them had disappeared and the sand from below the apron for a depth of 3 feet had been washed away, and though the hole was only $2\frac{1}{2}$ feet by $2\frac{1}{2}$ feet a long bamboo could be thrust in under the apron in every direction except in that of the anicut itself.

* In G. O. No. 2,725, 4th September.

2. The hollow was immediately filled with brick jelly and clay, a thick layer of concrete was placed over the hole in the apron ; planks were placed above the concrete and were loaded with rough stone. I am under no apprehension that there is any immediate danger to the anicut from the injury described above, but it is more than probable that the apron, and in fact the whole of the work, is more or less undermined, and the deep excavations for putting in the deep front and rear retaining walls will tend to increase the evil ; it was on this account I directed that the lower or down-stream retaining wall should be first completed, hoping that when a solid wall stopped the percolation under the body of the work, any small hollows might be filled up by sand driven under the work by the pressure of the water above or to the west of the anicut.

3. The new rear retaining wall has not been put in opposite the spot in the old apron, which has been injured, so that the hollow under the apron is in no measure due to sand having been drawn through the wells of the old retaining wall by the deep excavation for the new, but is due entirely to the process of percolation which has been going on more or less since the work was constructed. Were the old or upper apron to be destroyed, there is but little doubt that the water acting on the sand below would soon form a deep hole and would undermine the new retaining wall, and the destruction of the anicut and bridge would be inevitable. Under these circumstances it appears to be absolutely necessary to rip up the old apron, to ascertain whether the sand has been removed from under it elsewhere, this cannot be done till January next, and as it is more than probable that the whole apron will have to be taken up and relaid, it appears to be advisable to make provision for it in the Budget of 1868-69. I estimate the cost roughly at Rupees 18,000, this will provide 2 feet of masonry under the stone flooring instead of 1 foot as at present.

4. Usually in September there is little or no water passing over the anicut, and I had hoped to have been able to examine the anicut before forwarding this report, but on the 10th and 11th, while at the anicut, there were 15 inches of water passing over the south branch, and as the Budget of 1868-69 has to be submitted by the 1st proximo, it is necessary that orders regarding the provision of a sum for relaying the apron should be received early.

5. In the rough draft of my letter No. 791, I find I reported the injury to the apron opposite the 5th arch from the south end of the *south* branch of the lower anicut, and not *north** branch, as is printed in G. O. No. 2,725, dated 4th instant.

* Paragraph 2, line 4, for north read south.

No. 576. ORDER THEREON, 24th September 1867, No. 2,960.

IRRIGATION, No. 27.

1. The Governor in Council regrets to observe from this report that further signs of weakness and defective construction are manifesting themselves in the foundations of that portion of the south branch of the Lower Coleroon Anicut which has hitherto been supposed not to have suffered any injury, and fully concurring in the Superintending Engineer's opinion that the work requires to be thoroughly examined and the old apron taken up and relaid, His Excellency sanctions the entry of a sum of Rupees 18,000 for that purpose in the Budget of 1868-69 in anticipation of the submission of the requisite plans and estimates.

2. The error pointed out in paragraph 5 occurs in the original of the Superintending Engineer's letter of the 21st ultimo, No. 791.

(True Extract.)

(Signed) J. H. M. SHAW STEWART, Major, R. E.,
Under Secretary to Government.

To the Superintending Engineer, 6th Division.
,, Accountant General.
,, Controller of Public Works Accounts.
,, Revenue Department.

Ed. S. T. Augustin.

Concrete Concrete be thrown in under
the Apron in every direction except
in that part where Invert itself.—

2 — The hollow over immediately
filled with Brick Earth & Clay, & thick
layers of Concrete must then be rammed
the hole in the Apron - Planks
were placed above the Concrete &
were loaded with Cannon Shot -
under no apprehension that there
is any immediate danger to the
Invert from the injury described
above, but it is more than probable
that the Apron & invert the whole
of the Work is more or less undermined
& the deep excavations for
putting in the deep front and rear
retaining walls will tend to increase
the Evil - It was on this account
I directed that the lower or lowest
stream retaining wall should
be first completed, knowing that
when a solid wall & Cofferdam
prevented the Water under the
Work any small hollows might
be filled up by Sand driven under
the

the work by the pressure of the water
above or to the West of the Invert -

3 — The New retaining walls
have not been put in opposite the
spot in the old Apron which have
been injured so that the hollow under
the Apron is in no measure due to
Sand having been drawn through
the walls of the old retaining walls
by the deep excavation for the new,
but is due entirely to the process
of percolation which has been going
on more or less since the Work was
Constructed - Were the old Apron
Apron to be destroyed there is but
little doubt that the water acting
on the Sand would soon form
a deep hole & would undermine
the new retaining walls and the
destruction of the Invert & Bridge
would be inevitable - Under these
Circumstances it appears to be ab-
solutely necessary to inspect the
old Apron to ascertain whether the
Sand has been removed from under
it - Elsewhere, this cannot be done
till January next & as it is more

than

Public Works

Encl. 2960

Thos. Probable that the notice before
will have to be taken up & re laid
& appears to be advisable to make
provision for it in the Budget of 68/69.
& Estimate the Cost roughly at £1800
& Mr will provide £ for masonry under
the Stone flooring instead of 1' as at
present.—

4 — Should in September there is
little or no water passing over the
Sluices & should hope to have been
able to examine the Sluices before
forwarding their report, but on the 10th
& 11th while at the Sluices there
were 15" of water passing over the
South Branch & as the Budget of
1868/69 has to be submitted by the
15th Proving it is necessary that
Orders regarding the provision of a
Piece for relaying the Apron should
be received Early.—

5 — On the rough Draft of my letter
No 791 I find I reported the injury to
the Apron of Sluice the 5th Arch from
the South End of the South Branch
of the Town Sluices & not North Branch
as is printed in P. C. No 2725 dated
4th

Public Works Depth

No. 2960

Proceedings of the Madras Govt

Under date the 24th Sept 1867.

Read the following

From the Acting Supg
Engineer of the 6th Dn (T.G. 13th Sept/67
No. 879

The Governor in
Council regrets to
observe from this
report that further
signs of serious and
defective construction
are manifesting them-
selves in the foundat-
ions of that portion
of the south branch
of the Lower Coleroon
Anicut which has
hitherto been supposed
not to have suffered
any injury, and fully

Thos. Pro Lands Dept the whole Apron

Dr B. Engr 6th Dn
Accts Cl 5317

The Supt Engr
6th Dn

To The Secretary
to Government
P.W.Dr.

Dated 13th Sept/67
Rec'd 18th Sept/67
Letter No 879

Report upon the
removal of stones
from the floor of the
Glacis of the South
Branch of the Lower
Anicut opposite
to the 3d Arch of the
2d Section of the Bridge

No 575
C. 18th Septr 1867 Cl. 18th

No 2960 - 24th Sept 1867

concerning in the Supy
Engrs opinion that
the work requires to
be thoroughly examined
and the old apron
taken up and relaid,
An Expenditure sanction
the Entry of a sum
of Rupees 18000 for that
purpose in the budget
of 1868/69 in continuation
item of the redemption
of the requisite plans
and estimates -

2. The error pointed
out in para 5 occurs
in the original of the
Supy Engineers letter
of the 21 Ultimo, No
791 -

20526 dt 2/
- 4/81
- Entitled
- Remarks
dept 25/9/67

Pub. Works 1867 Department

Proc. of Govt. for September

No. 2960

Proc. of the Madras Govt

dated 24th September 1867

Sanctioning in anticipation

of the Submission of the Plans

and Estimates the entry in the

Budget of 1868/69 of a Sum of

Rs. 18,000 for the Examination of

the foundations of the South

Branch of the Kistna below

Pricott and for taking up and

re-laying the old apron.

No. 575-576

Sup. 1867 No. 185