

(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. <i>145-46</i>	Press Mis.
<i>286-88</i>	
Dated <i>17</i> / <i>1</i>	<i>1872</i> .

Not to be folded or roughly handled

15

*Proceedings of the Madras Government, Public Works Department,
17th January 1872.*

Read the following papers:—

No. 286. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Trinomalay, 8th December 1871, No. 201.

With reference to Memorandum No. 83 of the 30th November 1871, I have the honour to submit to Government the under-mentioned papers connected with the Vellaur bridge, recently destroyed:—

1 Plan.	1 Specification.
1 Survey.	1 Comparative Statement.
1 Estimate.	1 Abstract Estimate.

No. 287. From the Assistant Secretary to the Government of India, Public Works Department, (Buildings and Roads—Communications,) to the Secretary to the Government of Madras in the Public Works Department, dated Fort William, 11th December 1871, No. 448-B.—C.

I AM directed to request that, with the permission of His Excellency the Governor in Council, you will furnish this Office with the report on the failure of the Vellaur bridge, which is just now much spoken of in the public newspapers.

No. 288. ORDER THEREON, 17th January 1872, No. 145.

CIVIL WORKS, No. 13.

ORDERED that the following letter
be sent:—

(Here enter No. 146, dated 17th January 1872.)

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R.E.,

Secretary to Government.

Suptg. Engrs. Office, 5th Div.
Trinamalee 8th December 1871.

No.

No. 201.

18

From

Captain J. Vercoe R. E.,
Acting Superintending Engr.,
5th Division.

To.

Enclosures 6.

Colonel J. Carpendale R. E.,
Secretary to Government,
Public Works Dept.

Sir,

With reference to Memo No.
83 of the 30th November 1871, I have the
honour to submit to Government the
undermentioned papers connected with the
Vellaur Bridge, recently destroyed:-

- | | |
|------------|-------------------------|
| 1 Plan | 1 Specification |
| 1 Survey | 1 Comparative Statement |
| 1 Estimate | 1 Abstract Estimate. |

I have the honour to be

Sir,
Your Most Obedt. Servant

Jam. Vercoe Capt. R. E.
Acting Suptg. Engineer, 5th Div.

26/12/71

Govt. of 1872 Madras.

PUBLIC WORKS.

To.

Dated January 17th.

Recd.

Encl.

G. O., 17th January 1872, No. 145.

JANUARY

Nos. 286-288

Vellaur bridge.—Passing of
papers relating to the failure of the
bridge, South Arcot District.

34
PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 17th January 1872.

No. 289.

No. 146.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS, No 14.

SIR,—I am directed to acknowledge your letter of the 11th instant, calling for a report on the failure of the Vellaur bridge in South Arcot, and to forward, for the information of the Government of India, the only reports on the accident which have yet been received with the order of this Government thereon.

2. From these papers it will be seen that the immediate cause of the failure of the bridge has not yet been ascertained, but that this Government is quite sensible of the necessity for the most stringent inquiry into the matter, which will be made as soon as the state of the river will admit, and the result of which will be duly communicated to the Government of India. The inquiry will be conducted by the most independent and impartial agency at our disposal.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,

Secretary to Government.

Exd. F. R. Bantleman.

6/12/71

Chas 296

30 Dec 1871
 Mr. Secretary to the Govt of Madras
 Public Works Department
 Buildings & Roads
 Communications
 Sir,
 I have the honor to acknowledge the receipt of your letter of the 29th inst. in relation to the failure of the Velour bridge, which is now much spoken of in the public newspapers.
 I am directed to request that with the permission of His Excellency the Governor in Council, you will furnish this Office with the report on the failure of the Velour bridge, which is now much spoken of in the public newspapers.
 I am, Sir, very respectfully,
 Your most obedient servant,
 J. J. S.

All communications
 should be addressed to
 the Secretary.

No. 448 B.-M. C.
 GOVERNMENT OF INDIA.
 PUBLIC WORKS DEPARTMENT.
 BUILDINGS & ROADS.
^{Military}
 Communications

75

To The Secretary to the Govt of Madras.
 in the Public Works Department.

J. J. S.
 11th December 1871.

Sir,
 I am directed to request that with the permission of His Excellency the Governor in Council, you will furnish this Office with the report on the failure of the Velour bridge, which is now much spoken of in the public newspapers.

I have the honor to be,
 Sir,
 Your most obed^t servant,

J. J. S.
 Asst Secretary to the Govt of India

J. J. S.

Ordered that the follow-
ing letter be sent:-

146.
The Secretary to the
Govt. of India.

Sir

512,
I am directed to acknowledge your letter of the 11th Instant calling for a report on the failure of the Vellaur bridge in South Arcot, and to forward for the information of the Govt. of India the only reports on the accident which have yet been received with the order of the Govt. thereon.

From

8. M. 1871. Richard
Spencer. 1871. 6000.

27. April.

The Government of
India

October 11th } Memorandum
 October 18th }

De Witt

Respecting
the subject on the
subject of the
National Society -

No MS A 146. 19 Aug 1799

Oct 29

Strong's C.A. 11a

C. Langley Esq. 11.

From these papers it will be seen that the immediate cause of the failure of the bridge has not yet been ascertained, but that this Govt. is quite sensible of the necessity for the most thorough & fullest enquiry into the matter which will be made as soon as the state of the river will admit and the result of which will be duly communicated to the Govt. of India. [Meanwhile, I am to observe that there is no reason to suppose that the

most thorough

* I would insist. Enquiry will be conducted by the most independent and impartial agency at our disposal.

I would stop here. It seems not improbable that sufficient waterway was not afforded & that would be a defect in design. The materials & method of

construction will be better understood hereafter. I think that it is not expedient to indicate the opinion of the Dept. warmly and prematurely. All parties may have to then hereafter.

failure was owing to bad construction, but the structure while quite green was exposed to the force of an unprecedented flood that would have been a severe trial to fully seasoned masonry. The Bridge consisted of eleven arches of 45 feet span elliptical in form, having a rise of $11\frac{1}{4}$ feet and turned on piers 12 feet high - the extreme height from the flooring of the bridge being $33\frac{1}{4}$ feet. The ordinary flood level being 15.3 feet above the flooring. The foundations, supposing

them to have been
built according to the
sanctioned Plan and
specification, which
there is no reason to
doubt, were suitable
in design and of ap-
proved construction,
being 5 feet deep on
walls extending five
feet lower which were
filled with brick
cubes set in concrete
made of Hydraulic mor-
tar or of Hydraulic con-
crete entirely, and the
proper precautions of
masonry flooring and
retaining walls also on
wells was not omitted.

While under con-
struction towards the
end of 1869 this bridge
was subjected to a severe
flood "but the abutments,
Piers, and flooring, re-
mained uninjured and
not a brick was dis-
placed," but on this last
occasion it will be
seen that the Executive
Engineer calculated
there must have been
a depth of from 17 to
18 feet of water passing
under the bridge while
the Overseer gives it
at $19\frac{1}{2}$]

Depth 18 1/2 ft with a depth
from 21 to 23 ft.

28.00

C/P 5998 2622

Govt. of 1872 Madras.

PUBLIC WORKS.

To the Secretary to the
Govt of India

Dated

Recd.

Enc. 6

G. O. 17th Aug 1872. No. 1454/46

No. 286 @ 2880 289

Vellur Bridge. Papering orders on
papers relating to the failure
of the Vellur Bridge, South
Arcot Dt.

Forward of papers relating
to the failure of the Vellur
Bridge in the South Arcot
Dt.