MRO I—77,006—8-6-37.

(1) Number of pages 12

(2) Date of repair 18. 8. 43

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 3673 Press —Mis.—

504-505

Dated 23 — 11 — 1868.

Not to be folded or roughly handled

8.1.

No. 504. Read the following letter from the Consulting Engineer for Irrigation and Canal Company, to the Secretary to Government, Public Works Department, dated Madras, 29th October 1868, No. 79 —

1. I have the honor to submit, for the information of Government, the subjoined extracts from the Chief Engineer's report for the month of September, reporting damage to the canal in the upper part of the 1st Section, caused by heavy land floods on the 29th September.

2. The damage appears to have resulted from insufficient waterway at culvert No. 6, in the second mile, which, in addition to a passage under the canal, has a large amount of inlet waterway to the canal.

3. Under the circumstances, the damage to this sluice culvert and in its immediate neighbourhood is not surprising, but it is not altogether satisfactory that the left or lower bank in the fifth and sixth miles should have suffered from the water rising to one foot above ordinary full canal level.

4 It is expected that all the damage to earthworks will be completely repaired in three* weeks. Temporary arrangements will be made at No 6 culvert for the present season, and this masonry work will require to be materially modified to provide for future land floods

* From the 3rd instant it would seem

Extract from Report of the Chief Engineer for September 1868

* * * *

An accident has recently occurred in the 1st Section, owing to a land-flood I have not yet received the details

* * * *

P S —By a letter from Mr Cotton, dated the 3rd instant, accompanied with sections of the breaches, I learn that the damage in the 1st Section arose from the present works being insufficient to pass a heavy land flood during an ordinary fresh in the river The rain fell between mid-night and 8 A M on the morning of the 29th ultimo about the latter hour the breaches occurred

The land fresh rose against No 6 culvert until it not only filled the sluices covered by hanging shutters, (which acted properly, and admitted the water into the canal,) but rose above the side wall in which they are placed, pouring over into the canal The flood above the canal bank stood at a height of eleven feet six inches above bed of canal, or three feet six inches above full water level The Calingulahs Nos 1 and 2 came into action, and the sluices in them were opened , but they were insufficient to prevent the water rising in the canal, to nine feet above bed, or one foot above the Calingulah crests The local action at the culvert and, generally, the height of water in the canal, where the revetment has not been fully made up after settlement, caused the breaches, for in time the whole of the side wall of the culvert, sluices and all, was carried away and hurled in large pieces into the canal No 3 Culvert also gave way to a small extent The total damage, and time when each is expected to be repaired, is reported, as on the enclosed sheet

The head-sluices were closed at day-light, and the breaches are reported to have occurred at 8 A M on the Yedroor bank (No 8 above), the Overseer in special charge of that bank set to work with a gang of coolies, but failed to stop the breach Mr Cotton seems to have acted with great promptitude and good judgment, and has above 1,000 men engaged on these repairs No 6 Culvert is just above the narrow Doodyala cutting, and the water flowing into the canal there has no escape except down the canal and over Nos 1 and 2 Calingulahs I hope to visit the place and report upon the provision required for future security in the course of a few weeks

Damage done by the Flood of 29th September 1868

		Description of damage.	Time of repair
Upper Bank	1	Masonry of flood sluices, No 6 Culvert carried away	To be temporarily repaired to pass three or four feet water on 14th instant
	2	A partial breach, 100 feet long, 100 feet below the culvert, cut down to three feet above bed	Do to be completely repaired in three weeks
	3	A breach opposite the culvert, cut down to ten feet below bed at deepest hole, 100 feet long	Do do
Lower Bank	4	Do fifty-two feet long, twenty feet lower down cut to bed level	Do do
	5	Do 100 feet, thirty above culvert do	Do do
	6	A slip in the fourth mile, not breached	
	7	A breach fifteen feet wide in the 5th mile	Do do
	8	Do 102 feet wide at the 31st chain 6th mile	Do do.
Upper Bank.—9 Do at No 3 culvert, 1st mile			Already repaired

CUDDAPAH,
11th October 1863

(Signed) J H LATHAM,
Chief Engineer

No 505 ORDER THEREON, 23rd November 1868, No 3,673

IRRIGATION, No 23

Ordered to be recorded

Colonel, R. E.,
Secretary to Government.

To the Consulting Engineer for the Madras Irrigation and Canal Company
,, Manager for do. do

Exd S. T. Augustin.

Lower Bank

Govt. of India Public Works.

PUBLIC WORKS.

To

THE CONSULTING ENGINEER FOR
THE MADRAS IRRIGATION &
CANAL COMPANY
&c. &c. &c.

Dated Nov. 1868

Head

Sir

I have the honor, by order of Government, to forward, for your information, a copy of a letter No. 2477, dated 14th instant, from the Superintending Engineer, Cuddapah, reporting the damage done by the flood of 29th September 1868.

I have the honor to be,
Sir,
Your most obedient servant,

[illegible]
Secretary to Government.

Public Works Department
Fort St. George
Nov. 20-1868.

Damage done by the flood of 29th September 1868.

	Description of Damage	Time of repair	
Upper Bank	1. Masonry of flood sluices No. 6 Culvert carried away	To be temporarily repaired to pass 3 or 4 feet water on 14th instant	
Bank	2. A partial breach 100 feet long 100 feet below the culvert Cut down to 3 feet above bed	— Ditto — to be completely repaired in 3 weeks.	
Lower Bank	3. A breach opposite the culvert cut down to 10 feet below bed at deepest hole 100 feet long	— Do.	— Do.
	4. Do. 52 feet long, 20 feet lowered down — cut to bed level	— Do.	— Do.
	5. Do. 100 feet 30 feet above culvert	— Do.	— Do.
	6. A slip in the 4th mile, not breached		
	7. A breach 15 feet wide in the 5th mile	— Do.	— Do.
	8. — Do. — 102 feet wide at the 31st chain 6th mile	— Do.	— Do.
Upper Bank	9. — Do. — at No. 3 Culvert 1st mile	Already repaired.	

(Signed) J. H. Cotham
Chief Engr.
11th Dec. 1868
Cuddapah.

(True Extract)
[signature]
Capt. R.E.
Consulting for I.C. Company.

Rr. 625/68

Consulting Engineer's Office
Irrigation and Canal Co
Madras 29th October 1868

No. 79

From

Captain John Mullins R.E.,
Consulting Engineer I. and C. Co.

To

Colonel C. A. Orr R.E.,
Secretary to Government P.W.D.

Sir

I have the honor to submit for the information of Government the subjoined extracts from the Chief Engineer's report for the month of September, reporting damage to the Canal in the upper part of the 1st Section, caused by heavy land floods on the 29th September.

2 The damage appears to have resulted from insufficient waterway at Culvert No. 6 in the 2nd mile, which, in addition to a passage under the Canal, has a large amount of inlet waterway to the Canal.—

3 Under the circumstances the damage to the sluice culvert, and in its immediate neighbourhood, is not surprising, but it is not altogether satisfactory that the left or lower bank in the 5th and 6th miles should have suffered from the water rising to 1 foot above ordinary full Canal level.

4 It is expected that all the damage to earthworks will be completely repaired in

in 3 weeks - Temporary arrangements will be made at No 6 Culvert for the present season and this masonry work will require to be materially modified to provide for future land floods.

from the 3d Instant it would seem

Extract from Report of the Chief Engineer for Sept 1868.

× × × ×

An accident has recently occurred in the 1st Section owing to a land-flood, I have not yet received the details.

× × × ×

P. S. By a letter from Mr Collon dated the 3d Instant accompanied with sections of the breaches I learn that the damage in the first section arose from the present works being insufficient to pass a heavy land flood during an ordinary fresh in the River. The rain fell between midnight and 8 A.M. on the morning of the 29th Ultimo about the latter hour the breaches occurred.

The land fresh rose against No 6 Culvert, until it not only filled the sluices covered by hanging shutters which acted properly and admitted the water into the Canal, but rose above the side wall in which they are placed, pouring over into the Canal. The flood above the Canal banks stood at a height of 11.6 above bed of Canal

or

or 3' 6 above full water level. The Caliguelah No 1 and 2 came into action and the sluices in them were opened; but they were insufficient to prevent the water rising in the Canal, to 9 feet above Bed, or 1 foot above the Caliguelah Crests - The local action at the Culvert and generally the height of water in the Canal, where the settlement has not been fully made up after settlement caused the breaches, for in time the whole of the side wall of the Culvert; sluices and all, was carried away and hurled in large pieces into the Canal. No 3 Culvert also gave way to a small extent - The total damage and time when each is expected to be repaired is reported as on the enclosed sheet.

The head sluices were closed at daylight, and the breaches are reported to have occurred at 8 A.M on the Jedroor Bank - No 8 above the Overseer in special charge of that bank set to work with a gang of Coolies, but failed to stop the Breach. Mr Collon seems to have acted with great promptitude and good judgement and has above 1000 men engaged on these repairs. No 6 Culvert is just above the narrow Goodyalla Cutting and the water flowing into

into the Canal there has no escape except down the Canal and over Nos 1 and 2 — Calinguelahs — I hope to visit the place and report upon the provision required for future security in the course of a few weeks. — —

I have the honor to be
Sir
Your most obedient servant
John Trimble Captain R.E.
Consulting Engineer N.W.C.Co.

R. Mill

Ref 3673
Enclosure to
Lt. Col. Bruce's
letter of 23rd Nov 1846

Rec 4256

Govt. of {1868} Madras.

PUBLIC WORKS.

To Commencing Cost for
Repairs to Irrigation &
Canal Company

Nos. 611 - 615