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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2327 Press / Mis.

175-76
Dated 10-11- 1860.

Not to be folded or roughly handled

No. 175. Read the followiag Proceedings from the Chief Engineer, dated Chepauk, 26th October 1860, No. 6,280 :—

Read the following letter from Captain J. STODDARD, District Engineer, Godavery District, to the Deputy Chief Engineer, Northern Circle, dated Godavery District, Dowlaishwaram, 15th October 1860, No. 950.

SIR,

1. I have the honor to report for the information of the Chief Engineer the occurrence of several accidents, none however of a very serious nature, to the irrigation worksin this District, and which, with one or two exceptions only, were caused by the unusually heavy rains which fell during the latter half of last month.

2. In the Upper Táluqs, several tank bunds and a stone dam were breached, the repairs of which damages can, I am of opinion, be met from the sums allotted for repairs in the current year to the Range.

3. In the Lingainparti Range, the bund on the south side of the stream leading to the large Tank of Lingainparti was again breached in the same place as last year; and two tanks in Samulcottah burst their bunds, and discharged themselves into the Samulcottah canal. This local influx of water to the canal was so sudden and great, that the water overtopped the walls of the aqueduct just above the Samulcottah lock, and destroyed a portion of the extra thickness given to the wing walls, which was built on piles after the building was constructed to make a road sufficiently wide for carts. The water turned the wing walls proper of the aqueduct, and for some time endangered the whole structure, but fortunately Lieutenant Magnay, who was on the spot, was enabled to throw a dam across the Canal, and thereby saved it; the Dowlaishwaram head sluices were also all closed, directly I received a telegraphic notice from Lieutenant Magnay of what had occurred. The Yailairoo also came down in great force at the time of the accident, and materially assisted in preserving the aqueduct, as the water from the Canal above fell on water below. I have since inspected the building with Lieutenant Magnay and am glad to state that the damage done to the aqueduct is really nothing, and can be repaired again at a trifling outlay in less than a month.

I ought here to mention that had the Calingulas been built at each of the locks in the Samulcottah and Cocanada Junction Canal, this accident could never have happened. In order to dam the Canal across above the aqueduct, Lieutenant Magnay was compelled to breach the Canal and so draw off the water; after bunding the Canal this breach was repaired.

The new cut for the Yalairoo below the aqueduct not being quite finished it became necessary to breach the Junction Canal in one or two places on both sides to afford an outlet to the river (which this year came down in much greater force than usual), as the parallel drainage channel excavated this year was found not sufficient to discharge such a body of water fast enough; when the new cut is completed I consider that the Junction Canal will be quite safe from any irruptions of the Yailairoo. Besides the breaches made by this Department in the Junction Canal, two very considerable ones were made in it just above the Cocanada Lock by two villagers, who were discovered and sentenced to four months hard labor in irons by the Magistrate.

Of course in consequence of all these accidents, the Junction Canal is not navigable, but I hope Lieutenant Magnay will soon put matters to right.

4. The next accidents I have to mention are in the Kotarámachendrapooram Range, but these are not attributable to the heavy rains, the first which occurred was the partial destruction of a small waste Calingula in the Jujerain Channel on the 24th ultimo, near the village of Koyeroo, the body of which was completely washed away. The other was of a more serious nature, namely, the complete demolition of the Yerrapothárum Calingula on the 28th ultimo, as the water in the Channel at this time was not so high as it has often been, these two accidents can only be attributed to defective construction. I visited the spot shortly after, and on examining the broken masonry found that the mortar in the centre crumbled to powder easily when squeezed between the finger and thumb. The soil too is bad, being in alternate layers of earth and fine sand, so that probably the Calingula at Yerrapothárum was undermined by the water filtering through between these layers, for Mr. Plummer, Executive Agent, states that a few days before the accident occurred, the water being out of the Channel, the Calingula was inspected, when nothing particular was noticed.

It will probably cost about 1,000 or 1,200 Rupees to rebuild the Yerrapothárum Calingula, and I have directed Mr. Plummer to collect materials for doing so when the irrigating season is over. I consider that a common rough stone dam will be quite sufficient at Koyeroo, although it would not cost more than 4 or 500 Rupees to build a good masonry Calingula, and which may be done this year also, if the repairs funds admit of it. In rebuilding the Yerra-

potharum Calingula, advantage should be taken to raise the lock, and rectify the mistake made in the levels alluded to in my letter, No. 845, dated 29th ultimo.

5. I have stated that the rains were unusually heavy in September, in corroboration of which I may mention that 5 inches fell at Dowlaishwaram on the 14th ultimo in about three hours, and 7 inches at Samulcottah on the 27th ultimo in one day. The rains in the hilly or Upper Talúqs, I believe, were immoderately heavy, judging by the freshes in the Yailairoo and other Jungle streams. The total fall in September as indicated by a Crossley's Patent Pluviometer in the Office compound at Dowlaishwaram was $21\frac{3}{10}$th inches.

Submitted for the information of Government.

(Signed) W. H. HORSLEY, Lieut.-Colonel,
Chief Engineer.

No. 176. ORDER THEREON, 10th November 1860, No. 2,327.

1. The accidents reported in this letter seem to have been met by the local Officers with promptitude and energy.

2. The Government do not doubt that all necessary measures to repair the damage done will be taken.

3. Adverting to the remarks in paragraph 4 respecting the Yerrapotharam Calingula, the Government desire to be informed of the name of the Officer who built the work, and its cost.

(Signed) J. D. BOURDILLON,
Secretary to Government.

Godavari District
Dowlaiseram
15th October 1860

No 950

From
The District Engineer,
Godavari District

To
The Deputy Chief Engineer
Northern Circle

Sir

I have the honor to report for the information of the Chief Engineer the occurrence of several accidents, none however of a very serious nature, to the irrigation works in this District, and which, with one or two exceptions only, were caused by the unusually heavy rains which fell during the latter half of last month.

2. In the Upper Talúqs several tank bunds and a stone dam were breached, the repairs of which damages can, I am of opinion, be met from the sums allotted

allotted for repairs in the current year to the range.

3. In the Lingampatte Range, the bund on the southside of the stream leading to the large Tank of Lingampatte was again breached in the same place as last year; and two tanks in Samulcottah burst their bunds, and discharged themselves into the Samulcottah Canal. This local influx of water to the Canal was so sudden and great that the water overtopped the walls of the aqueduct just above the Samulcottah Lock and destroyed a portion of the Extra thickness given to the Wingwalls, which was built on piles after the building was constructed to make a road sufficiently wide for carts. The water ruined the wing walls proper of the aqueduct, and for some time endangered the whole structure, but fortunately Lieut. Magnay, who was on the spot, was enabled to throw a dam across the Canal, and thereby saved it; the

the Dowlaiseram Head Sluices were also all closed; directly I received a telegraphic notice from Lieut. Magnay of what had occurred. The Godavery also came down in great force at the time of the accident, and materially assisted in preserving the aqueduct, as the water from the Canal above fell on water below. I have since inspected the Building with Lieutenant Magnay and am glad to state that the damage done to the aqueduct is really nothing, and can be repaired again at a trifling outlay in less than a month.

I ought here to mention that had the Calingulas been built at each of the locks on the Samulcottah and Cocanada Junction Canal this accident could never have happened. In order to dam the Canal across above the aqueduct Lieut. Magnay was compelled to breach the Canal and so draw off the water after

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Of course in Consequence of all these accidents, the junction Canal is

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The soil is is bad being between the finger and thumb in alternate layers of earth, and fine sand, so that probably the Calingula at Yerrapotharum was undermined by the water filtering through between these layers, for Mr. Plummer, the Executive Agent, states that a few days before the accident occurred the water being out of the channel, the Calingula was inspected, when nothing particular was noticed.

It will probably cost about 1000 or 1200 Rupees to rebuild the Yerrapotharum Calingula, and I have directed Mr. Plummer to collect materials for doing so when the irrigating season is over. I consider that a common rough Stone dam will be quite sufficient at Rajeru, although it would not cost more than 4 or 500 Rupees to build a good masonry Calingula, and which may be done this year also if the repairs funds admit of it. In rebuilding the Yerrapotharum Calingula advantage

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Godavari District
Dowlaiseram
15th Octr. 1860

I have the honor to be
Sir
Your obt. Servt
J. Stoddart Capt.
District Engineer

To The Deputy Chief Engineer
Northern Circle

Submitted

No 6280

Submitted for the information

of Government

Central Office of Pr.

Chepauk

26th October 1860

Lt. H. Puckle Lieut. Col.

Chief Engineer D. Pr.

Lt. B. Lankfield

No. 2 Chief Engr. N. Circle

To

J. D. Bourchier Esqr.

Secy. to Government Pr. W. D.

Fort St. George

(12) P.W. 1860 Despatch
Pro: of Govt for Nos Nov 2585

From
Lieut Colo W. H. Pasley
Chief Engineer

To J. D. Bourdillon Esqre
Secy to Govt P.W.D.

Dated 26th }
Rec'd 27th } Octr 1860

No 2280

From Chief Engr 2/18th Decr 60 P.
C. No 3010 dis 30th Nov: 7. Encls No 29.
Submits Copy of a letter from the Dist Engr Godavery Dist reporting several accidents & the Irrigation works in the Godavery Dist.

No 2927. 10th November
Write an Order

No 2327 Nov 2327.

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Fort St George
10th Nov 60.

10 Copies
To the Chief Engineer

From the Chief Engr
D/5th July 1861 Ctd
274 in Prov. 11th Feby No 303

No 175 d/76.

30 October 1862 Nov