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MADRAS RECORD OFFICE.

Government of Madras.

Judicial [illegible] DEPARTMENT.

G.O. No. [illegible]	Press / Mis.
Dated [illegible]	18[illegible].

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 7th October 1862.

No. 112. Read the following Endorsement of Captain E. HEMERY, R. E., for Deputy Chief Engineer, Northern Circle, dated Chepauk, 29th September 1862, No. 303/N 343:—

Read the following letter from Major T. GREENAWAY, Acting District Engineer, Nellore, to Lieutenant-Colonel S. O. E. LUDLOW, R. E., Deputy Chief Engineer, Northern Circle, dated Nellore, 22nd September 1862, No. 1,921.

SIR,

1. I have the honor to report as follows on the effects of the late fresh in the Pennair, the water having so far subsided as to enable me to inspect the Anicut.

2. The river began to rise on the 3rd instant, on the 4th there were 8′ 2″ on deep bed (under-sluice floor) and 5′ 2″ on head sluice sill discharged down the main feeder 71,246 cubic yards per hour.

3. The fresh continued at this height fluctuating a few inches more or less till the 11th instant when the water went over the Anicut, giving discharge down main feeder 120,150 cubic yards per hour.

4. The water continued to flow over the Anicut from the 11th to the 19th, greatest height being 5′ over Anicut = 14′ on deep bed.

5. Greatest discharge down main feeder has been 140,316, average for the twenty days from 3rd to 22nd inclusive certainly not less than 120,000 cubic yards per hour, sufficient at a very liberal allowance for 40,000 acres.

6. The Anicut has stood the fresh very well indeed, the body and retaining walls are perfect, of the rough stone apron hardly a stone has been displaced, the head and under-sluices are quite uninjured, about five cubic yards of rough stone in the north ramp were displaced, this was a part of the old Anicut and the stones were of too small calibre, they will be replaced by work on the same scale as the main apron.

7. I sounded all along the tail of the work and found a hole 11′ deep 100 yards below the north under-sluices, another 13′ deep 120 yards below the old south under-sluices and one 12′ deep at nearly the same distance from the new south under-sluice, as the slope is gradual from the cut stone apron of the new south sluice to the depth aforesaid and the bottom stone lined all the way, it is evident that the very liberal allowance of horizontal tail has had its expected effect and removed the scouring action so far to the rear as to be free from danger. I was unable to ascertain by actual sounding whether the same holds good at the other under-sluices, as owing to the broken water I could not get near their cut stone aprons; but as I found it so at the new sluice (approachable from having been closed to save the water) and also all along the tail of the Anicut itself behind where greatest depth was only 6′ at the same distance from road-way I conclude it most probable.

8. I was agreeably surprised to find the metalled road-way across the Anicut so little damaged certainly more than two-thirds of the metalling still remain, and the road is by no means impassable for carts.

9. The nasty scour along the face of the work towards the north sluices has not yet been conquered but it is much less formidable than it was, the current used to strike full upon the face of the work about 200 yards from the north ramp then turn northward and scour along the face of the work to the north sluices. To remedy this Captain Mullins' cut through a sand bank lying immediately above the north sluice, thus connecting them with the muddoogoo above, and prolonged one of the groynes in front of the Anicut to assist the parallel channel to silt up. The effect has been that a large body of water now finds its way direct to the north sluice flowing nearly parallel to the north bank of the river, the channel through the sahd bank has greatly enlarged, there is thus both less water to pass by the middle channel and a less fall for what does so pass in its way from the centre channel to the north sluice, the said centre current therefore now approaches the face of the work in a curve, inclining gradually northward instead of at right angles, it scours not more than forty yards of the face and that at a greatly reduced

velocity. As far as it was safe to sound I could find no deep hole scoured out, and the groynes appear all safe. I propose to carry out the last groyne (nearest the under-sluice) to join the sand bank as soon as the water will permit, so as to make all the low fresh water pass through the new cut and allow the centre channel to silt up.

10. I have the honor to request your attention to Captain Mullins' proposal to bring down 10,000 Rupees worth of large stone and stock it near the work to be in readiness in case required for filling up holes or repairing the tail apron, as it is most important in case of need to have our materials ready on the spot.

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1 Letter from the District Engineer, Nellore, dated 22nd September 1862, No. 1,921.

Submitted for the information of Government.

(Signed) E. HEMERY, Captain, R. E.,
For Deputy Chief Engineer, Northern Circle.

No. 113. ORDER THEREON, 7th October 1862, No. 2,400.

1. Ordered to be recorded.

2. The attention of the Deputy Chief Engineer, Northern Circle, is requested to the suggestion contained in the concluding paragraph of the District Engineer's letter.

(Signed) W. I. BIRDWOOD, Colonel, R. E.,
Secretary to Government.

No. 1921

District Engineer's Office
Nellore 22 September 1862

37

From

Major Hemery
Ag District Engineer Nellore

To

Lieutenant Colonel Pendlebury R.E.
Deputy Chief Engineer S.C.

Sir

I have the honor to report as follows on the effects of the late freshes on the Penner the water having so far subsided as to enable me to inspect the Anicut

2. The river began to rise on the 3rd Instant (on this & more) rose 5'-2" on deep bed (sunken) floor) and 5'-2" on Head Sluice) till discharge down the main feeder 71246 Cyds per hour.

3. The fresh continued at this height fluctuating a few inches more or less till the 11th Instant when the water went over the Anicut giving discharge down main feeder 120150 Cyds per hour

4. The water continued to flow over the Anicut from the 11th to the 19th greatest height being 5' over Anicut = 11' on deep bed.

Greatest

5 Greatest discharge down train fredes has been 140,316. average for the 20 days from 3d to 22d inclusive certainly not less than 120,000 cyds per hour, sufficient but as very liberal allowance for 40,000 acres

6 The Ament has stood the freash very well indeed. The body and retaining walls are perfect, of the rough stone apron hardly a stone has been displaced the head and under Sluices are quite unmeasured, about five cubic yards of rough stone in the north ramps were displaced this was a part of the old Ament, and the stones were of the smaller calibre, they will be replaced by work on the same scale as the main apron

7 I sounded all along the back of the work and found a scour hole 11' deep 100 yds below the earth under Sluices another 13' deep 120 yds below the old South under Sluices and one 12' deep at nearly the same distance from the new South under Sluice, as the slope is graduat from the cut stone apron of the new South Sluice to the depth aforesaid and the bottom stoned all the way it is evident that the very liberal allowance of horizontal tail has had its expected effect and removed the scouring action so far to the rear as to be free from danger. I was unable to ascertain by actual sounding whether the same holds good at the other under Sluices as among the low Rew water I could not get near than cut stone apron but as I found it so at the new Sluice / approachable from having been closed to save the water / and also all along the back of the Ament nearly behind where greatest depth was only 6' at the same distance from roadway I conclude it most probable.

8 I was agreeably surprised to find the metalled roadway across the Ament so little damaged certainly more than two thirds of the metalling still remain, and the road is by no means impassable for carts

9 The nasty scour along the face of the work

work towards the north sluices has not yet been conquered but it is much less formidable than it was. the current used to strike full upon the face of the work about 200 yards from the north groyn then turn northward and scour along the face of the work to the north sluices. So anxiety Mrs. Captain Mullins cut through a sand bank lying immediately above the north sluice thus connecting them with the undulayers above and prolonged one of the groynes in front of the cancut to afford the parallel Channel to sett up. The effect has been that a large body of water now finds its way direct to the north sluice flowing nearly parallel to the north bank of the river. the Channel through the sand bank has been greatly enlarged, there is thus both less water to pass by the middle Channel and a less fall for what does so pass in its way from the Centre Channel to the north sluice the sand Centre current therefore now

approaches

7X

approaches the face of the work in a curve inclining gradually northward instead of at right angles, it scours not more than forty yards of the face and that at a greatly reduced velocity. As far as it was safe to sound I could find no deep hole scoured out and the groynes appear all safe. I propose to carry out the last groyne (nearest the under sluice) to join the sand bank as soon as the water will permit so as to make all the low fresh water pass through the new cut and allow the Centre Channel to silt up.

10 I have the honor to request your attention to Captain Mullins proposal to bring down 10000 Rupees worth of large stone and stock it near the work to be in readiness in case required for filling up holes or repairing the tail apron. as it is most important in case of need to have our materials ready on the spot.

I have the honor to be
Sir
Your most Obed Servt

Illegible

A.g District Engineer Kellung

Northern Circle Office

Sir

I have the honor to forward herewith a Memorandum of the Effects of the late Freshet in the Rivers Ganges and Jumna, as reported to me by the Executive Officers of this Circle.

I have the honor to be
Sir
Your most obedient Servant
(Signed) Captain R.E.
Offg Superintending Engineer
Northern Circle

To
Colonel H. M. Birdwood R.E.
Secretary to Government N.W.P.

No 4,037/29 Sept/62

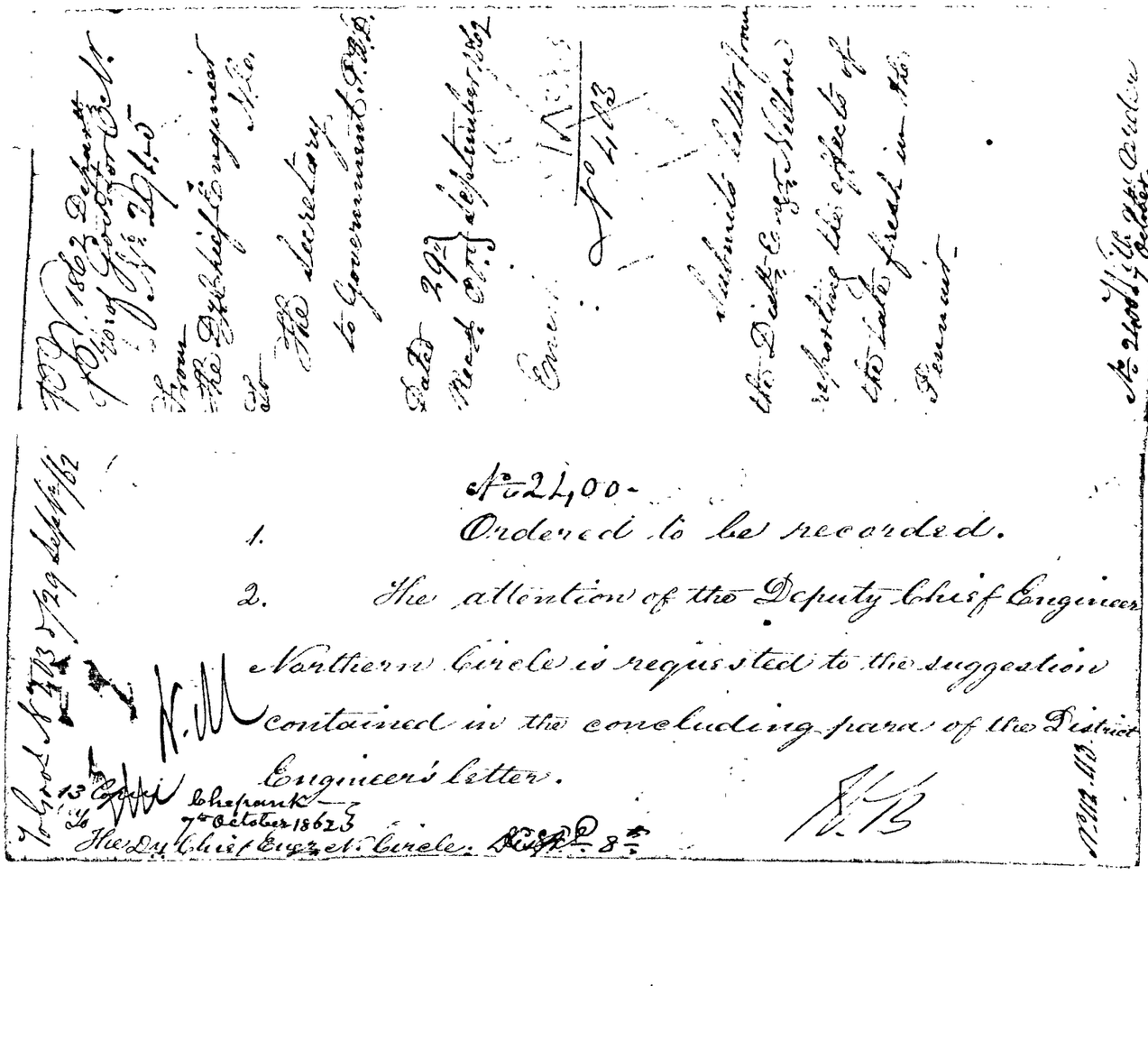
No 3113

From
The Acting Dy Engineer
Rohilcund
To
The Deputy Chief
Engineer N.C.
Dated 22 September 1862
Despd 24th do
Recd 26 do

P.W. 2946/62

No 1921

Reporting the effects
of the late freshet in the
Jumna



Rec'd 29th September 1862

Answered

No 2400

Submits letter from the District Engineer expressing his views as to the best mode of protecting the Lake front in this Command

From Lieut Col Duane Chief Engineer

To Genl Lorenzo Thomas A.G.

Dated 27th September 1862

No 2400

1. Ordered to be recorded.

2. The attention of the Deputy Chief Engineer Northern Circle is requested to the suggestion contained in the concluding paras of the District Engineer's letter.

By Command of Major General Halleck

H. W. Halleck

Major & A.D.C.

To Lieut Col Duane Chief Engr

13 Copies

Chesapeake

7th October 1862

To Hd Qrs Chief Engr Central Circle

Dept. No. 8