M.R.O. 1—77,006—8-6-37.

(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. 113-114	59	Press ~~Mis.~~
Dated	8- 1-	1873.

Not to be folded or roughly handled

No. 113. Read the following endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 4th December 1872, No. 63 :—

From the Acting Manager of the Madras Irrigation and Canal Company, to the Acting Chief Engineer for Irrigation, dated Madras, 27th November 1872, No. 285.

With reference to Government Order of the 13th March last, No. 695, sanctioning an advance of Rupees 50,000 for the repairs of the canal in anticipation of detailed estimates, I have the honour to forward the undermentioned estimates and document together with copy of the Chief Engineer's letter, No. 628 of the 14th instant, which accompanied them :—

One Chief Engineer's remarks on the Bill of Repairs for dry season 1872.
Two Estimates (Bills of cost).
One Abstract Estimate.

2. You will observe from the Chief Engineer's concluding paragraph that for next year's repairs that officer will submit regular estimates framed as accurately as possible while the water is in the canal, to be followed by certificates of the actual expenditure.

From the Chief Engineer, to the Acting Manager of the Madras Irrigation and Canal Company, dated Kurnool, 14th November 1872, No. 628.

Repairs for Season, 1872.

In reference to G. O., No. 695 of 13th March last, and your reminders marginally noted,

Nos. 372 of 5th September, and 441 of 21st ultimo.

I have the honour to enclose an estimate for *last* seasons repairs for submission to Government for their approval.

2. It will be apparent to Government that *some* of the work of repair admitted of estimate while water was in the canal, while some did not admit of accurate estimate until the canal was completely dry. In his anxiety to submit estimates accurate in minute detail, Mr. Browning postponed his application for sanction of funds last year to the verge of prudence, and then found himself obliged to ask for an "advance," Rupees 50,000.

3. The explanation required by Government took another month, and the sanction of the 13th March was too late to admit of all the repair which was desirable, though nothing of vital importance was omitted.

4. I hope for next year's repairs to submit regular estimates formed as accurately as possible while the water is in the canal. The certificates of expenditure will afterwards show the Consulting Engineer all that Government will further require to know.

Chief Engineer's remarks on the Bill of Repairs for dry season 1872.

The repairs to old walls are due either to the water blowing through the crevices of the rock on which they stand, or to the mortar having been insufficiently solid in some of the courses. Nos. 6 and 7 old walls have had their foundations carried deeper where needed, and a broad footing course added of solid masonry inside the canal. Other walls have needed no more than a puddle foreshore along the inner toe, and, of course, plastering.

2. The *new* wall is inserted instead of the old puddle core walls, in preference to risking more money in their mere repair. These old walls or bank, for they have been called *dry rubble banks* also, are constructed with puddle supported in rear by open rubble work, a construction which has proved unsatisfactory in principle. There now remains only one of these walls of any importance, and I propose replacing that by masonry so soon as it needs repair.

3. In Mile 70 is a 3-arch culvert on what were thought to be durable and strong slabs of rock, exposed to a considerable rush of water under a head of 3 or 4 feet. The rock has not stood, and has probably settled, owing perhaps to dirt beds between the slabs so as to shake the masonry on the up-stream face. It seems likely enough to give more trouble yet. The whole barrel needed newly covering with concrete, and the work suffered from shortness of time.

4. The Kambalapilly sluice shutters have been replaced by good teak ones, as recommended by the Consulting Engineer.

5. The repairs in the 6th Section are such as occurred on first filling the canal either to restore actual damage, or to replace parts which, after experience, were judged too weak.

6. The lower cills of most of the locks in 8th and 9th Sections have been rebuilt, both in order to secure the cills with larger stones and to place stronger masonry below the cills. Flooring was also added, especially in Locks 13 of 8th Section and Locks 3 of 9th Section.

7. The 150th mile bank at Vaikalair aqueduct, where it crosses the old byewash, has been put into safe condition.

8. Should any further information be required I will procure it. I think all or most of the repairs in the lower sections have formed the subject of reports.

9. It will be seen that the making up of banks, after their first year's subsidence, has been almost entirely deferred.

(Signed) J. H. LATHAM,
Chief Engineer.
(,,) C. A. BADHAM,
Acting Manager.

SUBMITTED to Government with reference to G. O., No. 695, of the 13th March 1872.

(Signed) C. J. SMITH, Captain, R.E.,
for *Chief Engineer for Irrigation.*

No. 114. ORDER THEREON, 8th January 1873, No. 59.

IRRIGATION, No. 11.

HIS Excellency the Governor in Council having on the representation of the Company's officers sanctioned in G. O., of 13th March 1872, No. 695, the execution of the repairs required to the canal, resolves to pass the bills, amounting to Rupees 34,700, submitted with the papers above recorded, but will expect to receive regular estimates for the repairs to be undertaken next year.

(True Extract.)

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government.

To the Chief Engineer for Irrigation.
,, Acting Manager of the Madras Irrigation and Canal Company.
" Gyr Madras Drs: H.E.Co's Accts

Ed. S. T. Austin.

Public Works Department

Proceedings of the Madras Government

Read the following

The Chief Engr for Irrigation. } H.E. No. 637/4th Decr/72

His Excellency the Governor in Council having on the representations of the Company's officers sanctioned in G.O. of 13th March 1872 No. 695 the execution of the repairs required to the Canal, resolves to pass the Bills amounting to Rupees 34,700 submitted with the papers above recorded.

R.I.C.

but will expect to receive
regular estimates for the
repairs to be undertaken
next year.

Yours

Ch. 6035

Govt. of {1872} Madras.

PUBLIC WORKS.

To The Chief Engineer for Irrigation.

Dated

Recd. Encl.

G. O. 8th Jany 1872, No. 59.

Nos. 113 & 114

Kaveri Delta Canal.

Bills amounting to Rs: 34700 for Repairs executed to the Canal, sanctioned with remarks.