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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	440 (2)	Press
B.P. No.		Mis.
Dated	23 - 2 - 195	6874

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
23rd February 1874.*

No. 434. Read the following endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 7th January 1874, No. 59:—

From J. H. LATHAM, Esq., Chief Engineer and Manager of the Madras Irrigation and Canal Company, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Kurnool, 13th December 1873, No. 180.

I HAVE the honour to submit, for sanction of the Madras Government, estimates of (1) the cost of repairs for 1874-75, (2) the conservancy staff, and (3) expenditure desirable on Capital Account not yet sanctioned, all for the upper sections of the canal—

I.—The estimate for repairs is, for convenience and simplicity, put into a general form. This seems to me best because it is likely that some of the repairs already sanctioned for 1873-74 may not have been completed and paid for before the 30th April, when the sanction for them expires. Indeed, it is very difficult, even up to March, to guess whether the state of the water and of irrigation will allow of particular repairs being executed and paid for before the end of the official year. I enclose, for information, a detail estimate of repairs now wanted, and framed upon working sketches which it is not worthwhile to enclose.

The repairs of the Main Canal chiefly consist of the raising of banks which have settled, and the stoppage of leakage where it seems dangerous (as near Kaderbagh and Sultanpur) or where it is wasteful.

For distribution, the chief repairs are the plastering of leaky sluices (especially those with *wells* outside the bank), and the preventing leakage round the frames, or where there are no frames, between the shutter and the face of the sluice. I estimate that this, and maintenance of the channels necessary to be maintained in order to admit of extensive flooding in case of drought, with all the petty works upon them, may be met by a rate of one penny per acre lying within reach of flooding. This will include that continual improvement which is best carried on as demand for it arises.

The repair of buildings has occupied my careful attention, and I recommend that so fast as the frame work of any thatched roof requires renewal it be taken down and re-adapted, with any necessary additions, and a permanent mud roof substituted. My estimates show the cost of so repairing the stations at Pagadiyal, Jupad, and Lockinsula on the model of Sunkesula, Podoor, and Velapanur, but with *teak* beams added where the present timber is insufficient. As to Lockinsula, it is built of stone-in-mud, and its foundations, or walls, have sunk so much as to show cracks in the superstructure. These, though not dangerous now, indicate that the walls will not safely bear the weight of a mud roof over the upper story, and I therefore propose to take down the upper story. This will leave a station ample for all requirements. It requires to be noted that the very high price of *teak* just now—double its normal price—must prevent these repairs being executed if it be maintained over next month, and in that case it may be necessary to replace the thatch, and postpone the permanent repair for a few years.

II.—The staff I propose to modify so as to include a staff of Amins, whose qualifications are much the same as those employed in the Revenue Survey Department, for simple field measurements. Where the Overseer is inferior, I give him

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a superior Amin, and *vice versa*; and with that arrangement I consider that the amount asked for Overseers and Amins will cover the cost of both.

III.—*Capital Account.*—Besides the fixing of the head sluice gear already ordered, and the erection of a machine shed, estimated to cost Rupees 2,500, for the machines now at Kurnool, and already covered by the estimate for foundry shed sanctioned by G. O., No. 3,642, of 1st December 1865, the following expenditure seems desirable:—

A *latrine*, to form part of the workshop buildings, for the Eurasian and Native employes.

Houses within the station compounds for the caste men engaged as Overseers and Dresser. I have long wished to get these men out of the villages; in the case of all, because their presence is needed at the station to which they are attached, in which they ought to keep their records and office, and where there are often stores which should be continually under their eye from time to time; and in the case of the Overseers, because of the very evident demoralizing effect of their living amongst the village people, and subject to their continual solicitation, or, what is more effective, annoyance. I have ascertained that the houses I now propose will be willingly used, and, if necessary, a rent paid. So far as rent goes it will be better to reckon the house as equivalent to a small increase of salary, and to charge the resident with all the repairs, white-washing, etc., of his tenement, so that he will be interested in keeping it in good order. I enclose sketches of the latrine (which is already erected) and of the houses, for which the old rafters and doors and windows now lying about will almost supply all the woodwork.

I also ask sanction for three new sluices to command villages not yet commanded.

The following estimates for the head works and upper sections, 95 miles, of the Madras Irrigation and Canal Company's Canal are submitted for the sanction of Government. They are intended to be carried out in 1874-75:—

Capital Account.

	RS.
Main supply ...	...
New gear to head sluice } ...	4,200
Distribution—three sluices ...	950
Buildings—latrine and Overseers' houses ...	1,580
Total Capital...	6,730

Revenue Account.

Main Canal... ..	5,000
Distribution works... ..	5,250
Buildings	2,650
Total	12,900

Conservancy Establishment Rupees 2,875 per mensem... ..	34,500
Allowances of do.	4,920

Total Revenue Account... 39,420

2. The Budget provision for repairs is Rupees 20,000, and this is probably nearer the sum likely to be required than the amount of the repair estimates now submitted. However additional estimates can be sent up as required.

*Proceedings of the Madras Government, Public Works Department,
23rd February 1874.*

3. The conservancy staff, it will be seen, amounts to three times the estimate for repairs and to more than the Budget provision under this head. The scale is undoubtedly disproportioned to the revenue derived hitherto from the canal, but it is questionable whether it is advisable to reduce it, as the canal works require careful and constant supervision, and an inadequate establishment might result in breaches and loss of revenue. I am disposed therefore to recommend that this scale, which is in amount that already sanctioned and in detail almost the same, should be passed for another year, and that, should no material increase of irrigation take place in the coming season, the Chief Engineer should be requested to see whether some considerable reduction cannot be effected, and to make his proposals for 1875-76 accordingly.

4. The repair estimates contain no provision for the locks in the 6th section, and as at any rate the wood and iron work must require to be painted or tarred and greased, etc., an estimate should be prepared and submitted. There are no locks in the upper five sections.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 435. ORDER THEREON, 23rd February 1874, No. 440.

IRRIGATION, No. 31.

THE estimates for the Madras Irrigation and Canal Company's Canal, submitted by the Chief Engineer for Irrigation and amounting to—

Under Capital	Rupees 6,730
„ Revenue Works	12,900
„ Revenue Establishment... ..	39,420

are sanctioned.

2. The special attention of the Chief Engineer and Manager of the Company will be requested to the remarks of the Chief Engineer for Irrigation on the subject of the cost of conservancy establishments, and the Government, while desirous of maintaining an efficient staff, wish it to be understood that, should no marked improvement take place during the next year in the prospects of the canal revenue, it will become imperative to effect a material reduction under the head of Establishments.

3. The up-keep of the locks appertaining to the Main Canal in the 6th section will undoubtedly require to be provided for, and the necessary estimate should be submitted for sanction.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Chief Engineer for Irrigation.
„ Agent and Manager of the Madras Irrigation and Canal Company.
„ Examiner of Irrigation Accounts.
Exd. S. T. Austin.
Spare Copies

Encl 8

The following estimates for the head works and upper sections 95 miles of the Madras Irrigation & Canal Company's Canal are submitted for the sanction of Government. They are intended to be carried out in 1874-75.

Capital Account

Main supply } Rupees 4,200
 and gear to head sluices }

Distribution - 3 sluices 950

Buildings - Latrine & overseer's houses 1,580

Total Capital Rupees 6,730

Revenue Account

Main canal Rupees 5,000

Distribution works 5,250

Buildings 2,650

12,900

Conservancy establishment 34,500

Rupees 2,875 per annum

Allowances of do 4,920

Total Revenue Account Rupees 39,420

2. The Budget provision for repairs is Rupees 20,000 and this is probably nearer the sum likely to be required than the amount of the repair estimates now submitted. However additional estimates can be sent up as required.

3. The Conservancy staff it will be seen amounts to 3 times the estimate for repairs and to more than the Budget provision under this head. The scale is undoubtedly disproportioned to the Revenue derived hitherto from the Canal, but it is questionable whether it is advisable to reduce it as the canal works require careful and constant supervision, and an inadequate establishment might result in breaches & loss of Revenue. I am disposed ^{therefore to recommend} that this scale which is in amount that ^{is already} sanctioned and

in detail almost the same, should be passed for another year, and that, should no material increase of irrigation take place in the coming season, the Chief Engineer should be requested to see whether some considerable reduction cannot be effected, and to make his proposals for 1875-76 accordingly.

4. The repair estimates contain no provision for the locks in the 6th section, and as at any rate the wood & iron work must require to be painted or tarred and greased, &c, an estimate should be prepared & submitted. There are no locks in the upper 5 sections.

Fort St George

7th January 1874

Whitcomb

St John

Chief Engineer for Irrigation

To The Secretary to Govt P.W.D.

Proceedings of the Madras Government
 Recd the following

From the Chief Engineer (S.E. No. 59 of 7th Jan'y 1874)
 for the S.E.

The estimates for the Madras Irrigation and Canal Company's Canal submitted by the Chief Engineer for Irrigation and a mounting to

Under Capital Rupees 6730
 — Revenue works — 12900
 — do — Establishment — 39420
 are sanctioned.

2. The special attention of the Chief Engineer and managers of the Company

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 16/11

PS

Both 1874. No. 100
 18-11-84

The Chief Engineer
 for Irrigation
 to the Secretary
 24 out 1874

12-5-9

Dated 17th
 Recd 10th Jan'y 1874

Recd 10th 8

Submits with
 necessary estimate
 for the head
 works & water see
 for 14 705 Canal
 in the enclosure

11/13/1874

No 404

2. 24

No 404. 23rd Jan'y 1874

Company will be re-
quested to the remarks
of the Chief Engineer
for Irrigation on the
subject of the cost
of Conservancy esta-
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Canal Revenue, it
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under the head
of establishments

3. The up-keep
of

of the locks ap-
pertaining to the
main Canal in the
6th Section will un-
doubtedly require to
be provided for,
and the necessary
estimate should be
submitted for sanc-
tion.

Wm. 8/1/74

L.M.W.

Mr. Eng^r for Dr. with 8 Encls
Agent & Manager Dr. H.C.
Ex^r of Dr. for Acc^t ✓

Rec^d with L.C. 26/2/74.

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No 118 A.
Govt. of 1874 Madras.
PUBLIC WORKS.

★
The Chief Engrs for
Irrigation

Filed

Recd.

Encl.

G. O. 23rd Feb 1874 No 440.

No. 434 & 435

To. S. H. J. Canal. Paving

orders on estimates, submitted
by the Chief Engrs for Irrigation,
for head works, &c, of the
S. H. J. Canal.