

G.O., No. 199. J

DATED 22/2/96

[Despatch Abstract.]

Buckingham Canal —
Estimate for improvement
to Southern Canal — from
Palat to Mercauam, Saeckand

Cross drainage in 49/1 and restoring ramp.—Here it is proposed to lay a cast iron pipe inlet, 1 foot diameter, and to fill in the breaches in the ramp.

Cross drainage at 50/1, East and West.—Here it is proposed to divert the drainage to the nearest drop inlets by enlarging existing channels and cutting out new channels. Provision is also made to restore the ramps now breached.

Cross drainage at 51/III, East.—Here a considerable drainage enters canal and shoals it up very much. It is proposed to put in a body wall, to serve as a flush inlet, and to protect the front and rear and sides with rough stone aprons and revetment. This body wall will be 42 feet long, and will act well in this locality. It is the cheapest mode of disposing of the cross drainage.

Cross drainage at 51/III, West Side.—Here it is proposed to divert the drainage by a channel to the drop inlet in 50/VII mile. This will effectually dispose of this drainage.

6. *General Remarks.*—Owing to the neglected condition that this portion of the south canal, on the south bank of the Pálár river, has been allowed to fall in for many years past, owing to want of funds for its efficient upkeep, it has been little used except by very small craft. But this estimate provides for placing it into a fair condition of efficiency for boats not exceeding 2½ feet draught, and will, when worked out, enable, for the first time in the history of the Buckingham canal, salt boats of such draught to convey salt to Madras from the Cheyar and Mercanam salt factories at the tail end of the South canal.

18th December 1895.

(Signed) A. S. RUSSELL,
Executive Engineer, Buckingham Canal.

No. 118 C.

Submitted to the Chief Engineer for Irrigation for favour of obtaining the sanction of Government to the estimate, amounting to Rs. 21,100, for improvement to the Southern canal from Pálár to Mercanam.

2. The balance of the estimate may be met from the balance available for unforeseen works of the Buckingham canal.

3. The undersigned has quite recently inspected the portion of the Buckingham canal referred to, and the necessity for carrying out, without delay, the work estimated for, is very marked.

10th January 1896.

(Signed) W. L. C. BADDELEY, Major, R.E.,
Superintending Engineer, II Circle.

No. 45 I.

Submitted to Government with a recommendation that the estimate forwarded by the Superintending Engineer, II Circle, be sanctioned.

14th Feb. 1896.

(Signed) R. R. E. DRAKE-BROCKMAN, Col., R.E.,
Chief Engineer for Irrigation.

ORDER—No. 199 I., dated 22nd February 1896.

The following estimate is sanctioned in lieu of the provision of Rs. 15,000 made for the work in the revised completion statement printed in Proceedings of Madras Government, No. 623 I., dated 8th August 1895, the excess of Rs. 6,100 being met from the balance of the amount reserved for unforeseen works of the Buckingham canal, which will then be reduced to Rs. 1,97,157 :—

Irrigation.
43. Minor Works and Navigation.
Minor works for which Capital and Revenue Accounts are kept.
Buckingham Canal.
Capital Account
I. Works.
2. Main Canals and Branches.
Improvements to Southern canal from Pálár to Mercanam.

6. Other cross drainage works—

	RS.	RS.
1. Pipe inlet at 4 ⁹ / ₅ mile	590	
2. Inlet at ramp 4 ⁶ / ₅ mile	150	
3. Inlet at 3 ¹ / ₅ mile	290	
		1,030
12. Earthwork—		
4. Earthwork clearance	15,100	
5. Improvements to banks and berms	4,870	
6. Cutting basin	100	
		20,070
Total estimate		21,100

2. This sanction is registered as No. 304 I. of 1895-96.

(True Extract.)

Under Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
Superintending Engineer, II Circle, with thirteen enclosures.
" Examiner, Public Works Accounts.
" Revenue Department.

Exd. Shaik Karim.
Spare Copies

IRRIGATION.
ACCOUNT.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated February, 22nd.

Recd.

Encl.

G.O. No. 199 I., 22nd Feb. 1896.

FEBRUARY.

Buckingham Canal

Estimate of Rs. 21,100 for improvements to Southern canal, —, from Pálár to Mercanam, sanctioned with remarks.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the

Read the following

From Supp Encl. no 118C of 10 Jan 1896
2045 I. of 14-2-96
Submitted to

Govt with a recommendation that the estimate forwarded by the Supp Encl. be sanctioned.

Order thereon.

No 199 I. of 22 February 1896.

The following

18 Feb

estimate is sanctioned in lieu of the provision of Rs 15000 made for the work in the revised completion statement printed in P.W.G. No 623 I. of 8th Aug^t 1895, the excess of Rs 6100 being met from the balances

Rs 203,257

of the amount reserved
for unforeseen work
of the Buckingham Canal
which will then be
reduced to Rs. 197,157

Irrigation
43. Minor works Drainage.
Minor work for which
Capital & Rev. Accts
are kept.

Buckingham Canal.
Capital Account.
I work.
2. Main Canal & Branches
Improvements to Southern
Canal from Palani to
Mercaanam.

6. Other Cross drainage
works. 1. Pipe inlet at $\frac{4}{7}$ mile. 590
2. Inlet at ramp $\frac{4}{5}$ mile. 150
3. Inlet at $\frac{5}{3}$ mile. 290 1030
12. Earthwork. 4. Earthwork clearance 15000
5. Inlets to banks &
berms. 4870
6. Cutting basin. 100 20070
Total estimate 21,100

2. His sanction

is registered as Rs.
304 I of 1895-96.

JH 12/2
Pined 14/2

DESPATCHED
5 MAR 96

To
The Chief Eng for I.
Supply to with 13 under
S. I. R.
Receipt.

less
14/2
1871

No. 623948-8-95 ✓

Estimate for improvement
to Southern portion
of Buckingham Canal
from Palar to Mercanur

Revised: 17-2-96

7.2.96
21/2

100

24/2

Revised

10/2/96

10-2-96

2 SP

Report to accompany estimate for Improvements to
South Canal from South bank of Palar River
46^{1/4} mile to $\frac{62}{14}$ mile. Estimate No. ^{21,100} 21,000

The Estimate has been prepared as economically as possible in order to provide for the main requirements of the Buckingham Canal South of the Palar River which for many years has not been in a satisfactory condition, even for the comparatively small craft that use it.

2. Clearance of Canal Palar South Lock to mile $\frac{53}{14}$

The deepening of bed is provided for to 3 feet below M.S.L., with 20 feet sole, & side slopes 2 to 1.

3. Deepening $\frac{58}{11}$ to $\frac{64}{14}$.

The deepening is provided for to 3½ feet below M.S.L., with 20 feet sole, and 2 to 1 slopes. The above depths, after completion of Palar South Lock, will allow of a minimum of ^{about 2½ feet of} water at the lowest tides of the year, while on completion of the Palar South Lock the heavy silting hitherto caused by daily tidal action will be prevented.

4. Improvements to Banks & berms $\frac{46}{III}$ to $\frac{62}{IV}$.

It is difficult to estimate accurately for this work. The Spoil removed from the Canal in certain furlongs will not suffice to fill in the very bad gullies now existing in some parts where towpaths have been completely obliterated. The amount allowed in the estimate for different furlongs has been fixed approximately, after detailed personal inspection furlong by furlong, and averages have been struck providing for restoration of the existing condition of banks. Except where the banks and slopes are very badly gullied, no attempt has been made, beyond providing for a few petty repairs, to cut them down or to resection them. ^{the banks & slopes are} Wherever very badly gullied and completely out of section, it is proposed to reform the gullies & berms by filling ^{these} with Spoil removed from Canal, and, where such Spoil is insufficient, by cutting down the top of bank & utilizing earth from it, thus obviating a long lead. Surfing is provided, where necessary, to banks & water slopes.

5. Disposal of Cross drainage. $\frac{38}{V}$ to $\frac{50}{VI}$.

Cross drainage at $\frac{46}{V}$ West side. Here a drainage enters Canal & frequently shoulds it badly. It is proposed to build a body wall across the drainage, 32 feet long, protected by a stone apron. This will ease off the steep slope, check the rapid flow of water, and minimise further shoulding. No cheaper method of dealing with this drainage stream is possible.

Cross drainage in $\frac{47}{I}$ & restoring ramp. Here it is proposed to lay a cast iron pipe Inlet, 1 foot diameter, and to fill in the breaches in the ramp.

Cross drainage at $\frac{50}{IV}$ East & West. Here it is proposed to divert the drainage to the nearest drop Inlets by enlarging existing channels & cutting out new channels. Provision is also made to restore the ramps now breached.

Cross drainage at $\frac{51}{III}$ East. Here a considerable drainage enters Canal and shoulds it up very much.

It is proposed ~~to~~ to put in a body wall, to serve as a flush Inlet, & to protect the front & rear & sides with rough stone aprons and revetment. This body wall will be 42 feet long, and will act well in this locality. It is the cheapest mode of disposing of the cross drainage.

Cross drainage at $\frac{51}{III}$ West Side

Here it is proposed to divert the drainage by a channel to the drop Inlet in $\frac{50}{VII}$ mile.

This will effectually dispose of this drainage

6. General Remarks.

Owing to the neglected condition that this portion of the South Canal, on the South bank of the Palar River, has been allowed to fall in for many years past, owing to want of funds for its efficient upkeep, it has been little used except by very small Craft. But this estimate provides for placing it into a fair condition of efficiency for boats not exceeding $2\frac{1}{2}$ feet draught, & will, when worked out, enable, for the first time in the history of the Buckingham Canal, salt boats of such draught to convey

Salt to Madras from the Cheyar & Mercanam salt factories at the tail end of the South Canal.

450

As Russell

Executive Engineer

Buckingham Canal.

18th December 1895 }

Chak
18/12/

Sh
18/12

CHIEF ENGINEER
FOR IRRIGATION.
20 JAN 96
No.

Dec 2
1868/86

Buckingham Canal
Improvements
of South Canal from
 $\frac{46}{111}$ to $\frac{62}{111}$ - Report
to accompany the
estimate for —

1 Note of cross sections of the
1 Report
1 Calculation sheet
1 Detailed estimate
1 Detailed estimate
1 Calculations sheet
1 General abstract

Enclosures: 7. No. 118-C
13-1-96
1 Note of cross sections
of the South Canal
v. 118-C

Letter from the Resident Engineer,
Buckingham Canal Division, to the Super-
-intending Engineer, (Circular, No. 2262 of 12-12-95).

I have the honour to forward for
early sanction an estimate, amounting
to Rs. 2,000, for improvements to South Canal,
46 miles 3 furlongs, to 62 miles 4 furlongs,
together with the marginally noted en-
closures. This estimate is the last of the
estimates ordered for improvement of South
Canal, and its execution should be
put in hand early next year, in order
that it may be worked out by March
1897, when the Completion estimate of
the Canal is to be closed.

2. Provision for this work was made
in the revised Completion estimate of
the Buckingham Canal sanctioned in
G. O. No. 623 D. of 8th August, 1895.

3. The report accompanying the es-
-timate explains in detail the ne-
-cessity for the works.

Submitted to the Chief Engineer
for

for sanction for favour of obtaining
the sanction of Government to the
estimate, amounting to Rs 2,10,000 for
improvement to the Southern Canal
from Palur to Marcanum.

2. The balance of the estimate may
be met from the balance available
for unforeseen works of the Bucking-
-ham Canal.

3. The undersigned has quite recently
inspected the portion of the Bucking-
-ham Canal referred to, and the ne-
-cessity for carrying out, without delay,
the work estimated for, is very marked.

W. B. Baddley Major R.E.
Superintending Engr.
Circle.

From

The Supt. Engineer



To

The Chief Engineer,
Irrigation.

No. 118-C

of 10th January 1896.

Enclos.

Pl. 5.1

1568/96

Improvements to South
Canal from Salas ^{River} to
Museum — Submitting
for sanction estimate for the