

G.O., No. 109. 110.

DATED

February 8 1898

2/11/98

[Despatch Abstract.]

Sivakodu Side channel: Estimate of Rs 2,570 for excavating the — from the left bank, Gumavaram Canal, Central Delta, Godavari Delta System, sanctioned, and a copy of the Pro: ordered to be forwarded to the Govt. of India.

Sivakodu Side channel: Forwarding copy of the Pro: sanctioning an estimate of Rs 2,570 for excavating the — from the left bank, Gumavaram Canal, Central Delta, Godavari Delta System.

2/11/98
Regd
10/2/98

BACK PAPERS:

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1898} of Madras. PUBLIC WORKS.

Recd.

Enclosures

Regd.

1898.

Spare copies

G.O., Nos. 109, 110 I., 8th February 1898.

FEBRUARY.

Sivakodu Side Channel

Forwarding copy of the Proceedings sanctioning an estimate of Rs. 2,570, for excavating the — from the left bank, Gunnaram canal, Central delta, Gódávári delta system.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

READ—the following papers:—

From. W. C. DeMORGAN, Esq., M.I.C.E., Superintending Engineer, I Circle, to the Chief Engineer for Irrigation, dated Waltair, 4th December 1897, No. 1609 G.D.

I have the honour to submit plans and estimates, amounting to Rs. 2,080, under Capital account for the Sivakodu side channel from the left bank, Gunnaram canal, in the Gódvári Central delta.

2. This channel has its proposed head at $37\frac{1}{8}$ mile, left bank, Gunnaram canal, and a design is submitted for a head sluice at this point.

3. The Executive Engineer, Gódvári Central division, has estimated for a rising shutter. My predecessor objects to this. For small sluices I prefer the arrangement, and have therefore left the question open.

4. Between mile $37\frac{1}{8}$ and mile $38\frac{3}{4}$, there are nine palmyra spouts, from which 600 acres are irrigated.

5. There is consequently no means of regulating the supply of water, and great waste results.

6. If the works now recommended for sanction are approved, this will be remedied.

7. No additional land need be acquired.

8. It may be classed as unremunerative work, as no additional area will be brought under wet cultivation.

9. The work will probably be closed before end of March 1900.

ENCLOSURES.

REPORT to accompany Estimate for proposed Sivakodu Side Channel.

Estimate RS.
2,080

The proposed channel will take off from 37 miles 0 furlong 370 feet, Gunnaram canal. It is intended to prevent the excessive waste of water that at present takes place from nine palmyra spouts in the canal left bank between $37\frac{1}{8}$ miles and Sivakodu lock ($38\frac{3}{4}$ miles). These nine spouts between them irrigate no less than 600 acres (see longitudinal section) and, as the field levels vary from + 9.50 to + 11.50, while the canal water level is often + 14.00, and as the spouts are of course provided with no means of regulation, the wastage is naturally very great.

2. No land has to be acquired for the channel, as there is already a strip of sufficient width, belonging to the Public Works Department, along the outer toe of the canal bank.

3. The discharge required is 15 cubic feet per second, and this can be obtained by allowing a bed width of 3', with depth $2\frac{1}{2}'$, side slopes $1\frac{1}{2}$ to 1, and fall 15" per mile. The channel left bank will be 2' above F.S.L., and will have top width 3' and side slopes $1\frac{1}{2}$ to 1. The centre line of the channel will be 18' from the centre line of the canal bank; and the centre line of the channel left bank will be uniformly 10' from the centre line of the channel. The earth for the bank will be obtained from the canal bed during the annual closure of the canal.

4. The channel will tail into an existing field "bodhi" irrigating 93 acres.

5. Three strong palmyra bridges will be provided—one opposite a canal ferry ballacut at $\frac{1}{16}$ mile, and two others at important crossings at $\frac{1}{8}$ mile (Pemula drain) and $1\frac{3}{8}$ mile (Kamana-palam punta).

6. The sluice at the head of the channel will be of the usual kind for parallel channels. The plan shows a fixed screw on which the shutter rises; this arrangement being always submerged, does not wear well, so the rising pattern of screw common in the best delta should be provided, worked by a capstan head female nut which can be locked to the beam.

17th Nov. 1897.

(Initld.) J. C. L.

shutter works against friction rods, instead of in grooves, and the locking arrangement is simple, cheap and effective.

For sluices of this small size, I prefer the arrangement proposed by the Executive Engineer, which will, unless orders are given to the contrary, be adhered to.

4th Dec. 1897.

(Initld.) W. C. DeM.

7. The channel and head sluice can be completed during the canal closure of 1898 or of 1899, if no funds are available till then. Materials for the head sluice will, of course, have to be collected before the closure.

Estimate Form—Abstract—Classified.

Sub-head.	Names of Works.	Amount of estimate for individual works.	Total of sub-heads.	Total for each canal or distributary.	Total of each main head.
1	2	3	4	5	6
	CAPITAL EXPENDITURE NOT CHARGED TO REVENUE.	RS.	RS.	RS.	
	49. IRRIGATION.				
	Gódvári Delta System.				
	Open Capital Account.				
	Central Section, I. Works.				
	Gunnaram Canal.				
	3. Distributaries.				
	Unremunerative Work.				
	Excavating Sivakodu side channel for left bank of the Canal.				
3. Works..	Head sluice	750	750		
4. Earthwork	Excavation	1,227	1,227		
5. Miscellaneous	Sundries	103	103		
	Total I. Works			2,080	
	II. Establishment			478	
	III. Tools and plant			12	
	Total Estimate			2,570	

MUKHAMALA,
6th November 1897.

(Signed) W. J. J. HOWLEY,
Ex. Engineer, Gódvári Central Diyn.

No. 14 I.

Note by the Chief Engineer for Irrigation.

There are nine palmyra spouts in the left bank of the Gunnaram canal, Central delta, Gódávári delta system, between 37½ miles and the Sivakodu lock (38¾ miles), from which 600 acres of land are irrigated. No means exists for regulating the supply of water from them, and in consequence, a great waste takes place at present. To remedy this, it is proposed to excavate the Sivakodu side channel from 37 miles 0 furlong 370 feet, Gunnaram canal, and construct a sluice at the head of the channel with a vent 2 feet high and 1½ feet wide with sill 6 inches below the proposed channel bed level. The accompanying estimate of Rs. 2,080 submitted by the Superintending Engineer, which provides for these works, may be sanctioned.

2. The work is classed as "unremunerative" and will probably be completed by the 31st March 1900.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

17th January 1898.

ORDER—No. 109 I., dated 8th February 1898.

The estimate amounting to Rs. 2,080, or Rs. 2,570 including establishment and tools and plant charges, for excavating the Sivakodu side channel from the left bank, Gunnaram canal, Central delta, Gódávári delta system, is sanctioned.

2. This sanction is registered as No. 166 I. of 1897-98 and will expire on the 31st March 1900.

3. Ordered that a copy of these proceedings be forwarded to the Government of India for information.

[Here enter No. 110 I., dated 8th February 1898.]

(True Extract.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.

" Superintending Engineer, I Circle, with nine enclosures.
" Examiner, Public Works Accounts.

ENDORSEMENT—No. 110 I., dated 8th February 1898.

Forwarded.

(By order.)

(Signed) W. HUGHES,
Joint Secy. to Government,
Irrigation Branch.

Public Works (1898) Department.

CURRENT No. 567

Order

From The Chief Engr for Irr

No. 14 I

Dated 17-1-1898.

Received 21.1.98

Enclosures 11 (3 plans)

Spare copies

SUBJECT.

Sivakodu Side Channel in the
left Side of Gunnaram Canal
Godavari. Estimate of Rs 2080 for
excavating the - also recommending
for sanction the -

BACK PAPERS.

FURTHER PAPERS.

No.	Date.

No.	Date.

His Excellency the Governor.

PUBLIC WORKS DEPARTMENT.

IRRIGATION BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Sivakodu Side Channel
on the left side of Gumman Canal
Esti of Rs 2050 for encavating the —

UNDER date the

READ the following

From the Super. Engineer, First Circle. (H.R. No. 1609-G.D. dated 4. 12. 97).

№ 14. I. 24 17. 1-98

Note by the Chief Engineer for Irrigation

There are nine *palmyra* spouts in the left bank of the Gunnaram Canal, Central delta, Godavari delta system, between $37\frac{1}{8}$ miles and the Sivakodu lock ($38\frac{3}{4}$ ^m), from which 600 acres of land are irrigated. No means exists for regulating the supply of water from them, and in consequence, a great waste takes place at present. To remedy this, it is proposed to excavate the Sivakodu side channel from $37\frac{m}{8} - 0$ $37\frac{m}{8}$ $37\frac{m}{8}$, Gunnaram Canal, and construct a sluice at the head of the channel with a vent 2 ft. high and $1\frac{1}{2}$ ft. wide with sill 6" below the proposed channel bed level. ~~The vent will be fitted with a shutter and gearing, as proposed by the design of the shutter being left to the Super. Engineer.~~ The accompanying estimate of Rs. 2,080 - submitted by the Super.

With regard to the question
of the pattern of Shoulder I
consider it much better to use
Angle iron, than round rods
for the Shoulder to slide on and
agree with Mr Laminie in preferring
a using screw for small lifts, but do
not object to the S.E. using a jacks
screw if he prefers it. Each system