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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No. 1385	Press
B.P. No.	Mis.
Dated 15. 5.	195 . 1575

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
15th May 1875.

Read the following —

No 423

No 342. *Note by the Chief Engineer for Irrigation*

THE following modifications of the arrangements of certain of the canals of the Western Delta, Godavery, having been found to be necessary, they are submitted for the approval and sanction of Government

2. *Bank Canal*—In paragraph 41 of the Notes of Inspection of this Delta it was noticed that the present head of this canal is altogether unsuitable, and that alternative arrangements for its improvement were to be investigated This has been done, and the papers submitted* by the District Engineer show that a very good line, C D on the survey, can be obtained at a cost of Rupees 4,130, the off-take being, as at present, below the bridge over the Mukkamala Canal, while a new head above the bridge with the new bridge involved would require an outlay of Rupees 12,730 Such being the case the cheaper line is that which should be adopted

Proceedings, 15th July 1874, No 1,906

* No 2,636, 17th November 1874

3 When the completion estimates were sanctioned the arrangement of the locks of this canal was not finally settled, and after further discussion it was decided that a lock should be built at Siddhantum, and that the one proposed for Khandavelly should be omitted The District Engineer transmitted with his letter No 1,598, of the 30th August 1874, revised plans and estimates for the Siddhantum and Kodair locks, and the general result was as follows —

Proceedings, No 768, 14th March 1871, Note, paragraph 11
Paragraph 16 of Note
Proceedings, 18th April 1871, No 1,077

	Sanctioned Estimate	Revised Estimate
	RS	RS
Khandavelly Lock . .	.. 14,400	
Siddhantum „	...	16,460
Kodair „	.. 18,570	17,300
	32,970	33,760
Excess	790	

When approving these estimates the District Engineer was requested to report the modification of cost and quantity of earthworks which this settlement of the number and position of the locks would occasion, and in a Memorandum, No 1,058-A, of the 15th December last, he was asked to submit a complete revised abstract estimate for the canal, in order that all the alterations proposed might receive the formal sanction of Government In the letter as per margin Major Beatty reported that it would take some months to prepare a complete revised abstract estimate, because there would be extensive alterations in the Dodiputla lock and its channels at the lower end of the canal, and that, as the improvement of this canal formed an important part of the current year's work, he had authorized the Range Officer to proceed with the earthworks of the first 16 miles and the Siddhantum and Kodair locks, and he asked for permission to go on with the lock weirs as well. These proposals were approved, but

No 659, 1st September 1874

No 3,144 of the 11th January 1875

No 75, 19th January.

he was told that if a complete estimate could not be got ready at once a revised abstract for that part of the canal, the details of the arrangements of which had been settled, should be submitted, and this has now been done *

* District Engr 's No 3,862, 12th March 1875

4 The comparative statement shows an excess of Rupees 12,861 on this part of the canal, and the principal items are—

	Rs
Earthworks	5,000
Locks . .	4,090
Siddhantum Weir	3,465

The first item is, for the most part, due to the new head, and it will be seen on referring to the end of paragraph 11 of the Note on the estimates that no regular estimate for the earthworks of this canal were submitted. The excess on locks supposed to be Rupees 790, when the revised arrangements were approved was found to be 4,790, owing to the amount of the original estimate for the locks having been taken, instead of that sum reduced by Rupees 2,000 for each lock owing to alteration of size * Subsequently it was found that a reduction of Rupees 700 was practicable in the foundations of the Siddhantum lock, and so the net excess is Rupees 4,090 The sanctioned estimate provided Rupees 35 for minor improvements to the Siddhantum lock weir, but as this could not conveniently be adapted to carry the road, and as it is not in line with the site at which the new lock must be built, it was decided on inspection that it would be preferable to construct a new weir on a better design

Proceedings, 14th March 1871, No 768

* *Vide* end of paragraph 11 of Note

Latter part of paragraph 41 of Inspection Notes Proceedings, 15th July 1874, No 1,906

5 The District Engineer reports that the Range Officer is of opinion that there will be a saving of Rupees 3,000 on the canal below Kodair, but until the arrangements shall have been worked out in detail it will not be advisable to take this into account. It may until then be taken to be quite as probable that there will be an excess rather than a saving Altogether, then, so far as it is at present known, the canal will cost Rupees 1,20,761 against a sanction of Rupees 1,07,900, or an excess of 12 per cent. This need not, it is thought, be deemed in any respect unsatisfactory, because it was intimated at the time the completion estimate was sent up that considerable revision would be required, and much of the excess is due to improvements of importance.

6 In December last the District Engineer submitted a revised plan, sections, and estimate for $7\frac{1}{4}$ miles of this canal below Penumuntra The canal had been completed down to 21 miles where originally a lock was to have been built, but on working out the details of the canal below it was found that by placing the lock $2\frac{1}{2}$ miles lower down and altering the line a saving of Rupees 7,738 on earthworks, subsequently raised to Rupees 8,062, would be effected, the canal would be shortened 1 mile, and the level at the crossing of the Buswarau Kodu would be raised 8 inches,

Velpur Canal.

No 3,030, 29th December 1874

No 4,016, 24th March.

a change for the better To one point, possible change of amount of land compensation, the District Engineer's attention was called in the memorandum approving of the alterations, and as he has not reported any excess under this head in his letter of the 12th March last, No 3,862, with which he has transmitted a comparative statement exhibiting a saving of Rupees 9,280 on certain earth and other works, it seems improbable that there will be any excess It is to be noticed that the statement refers only to those works of the canal which have as yet been taken up and the details settled The estimate for these was Rupees 90,960, and the total sanction is Rupees 1,41 060, but on the whole, judging from the note on the estimate, paragraph 15, there is no reason to expect excess on the remaining items, though the arrangements for crossing the Buswarau Kodu have not yet been settled finally Under these circumstances the sanction of the alterations above detailed is recommended

No 58, 13th January

7 Taking the two canals together the net excess is likely to be, so far as can at present be ascertained, Rupees 3,581, and as this is about $3\frac{1}{2}$ per cent on the Bank Canal estimate by itself, there appears to be no necessity for any special sanction Complete revised estimates for each canal from end to end should however be submitted by the District Engineer as soon as possible, when such further orders as may appear necessary can be passed.

OOTACAMUND,
28*th April* 1875

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

No 343 ORDER THEREON, 15th May 1875, No 1,388

IRRIGATION, No 36

THE papers submitted by the Chief Engineer for Irrigation show that the result of certain necessary or desirable modifications of the first 16 miles of the Bank Canal and of $28\frac{1}{4}$ miles of the Velpur Canal are that the former will cost Rupees 12,861 more, and the latter Rupees 9,280 less, than the amounts sanctioned in the completion estimates of the Western Delta, Godavery, and that the net excess is about $3\frac{1}{2}$ per cent on the estimate Rupees 1,07,900 of the former

Proceedings, 14th March 1871, No 768

2 The particulars given relate to the portions mentioned of the two canals for which the details have now been worked out, and until the revised abstract estimates for the whole of the works shall have been prepared the ultimate cost of each will not be clearly known These abstracts should be completed as soon as possible, but, in the meantime, the modifications recommended for approval are sanctioned

(True Extract)

Major, R E,
Offg Joint Secretary to Government

To the Chief Engineer for Irrigation
„ District Engineer, Godavery
„ Controller of Public Works Accounts.

Exd. S T Austin.

Spare Copies

520 [illegible]

The Estimates submitted by the Chief Engineer for Irrigation shew that the result of certain proposed modifications of the Irrigation Works on the 76 miles of the Old Canal and 25¼ miles of the Belpina Canal are that the former will cost Rupees 12,867 more than the sanctioned cost of the latter Rupees 9,28,[illegible] less than the sanctioned cost of the Completion estimates of the Works. Public Works, showing that the net saving is about 3½ lacs

Govt. of India letter No. 765 dated 14th March 1873

2. The particulars given relate to portions of the two Canals mentioned in which the details have not been worked out, and until the major abstract estimates for the whole of the works have been prepared, the ultimate cost of each will not be clearly known. These abstract should be completed as soon as possible, and in the meantime, the modifications are recommended for approval and sanction only.

No 423 Pg 1

Note by the Chief Engineer for Irrigation.

The following modifications of the arrangements of certain of the Canals of the Western Delta, Godavery having been found to be necessary, they are submitted for the approval and sanction of Government.

Bank Canal Ppo 15th July 1874 No 1906. 2. In para 41 of the notes of Inspection of this Delta it was noticed that the present head of this Canal is altogether unsuitable, and that alternative arrangements for its improvement were to be investigated. This has been done and the papers submitted by the District Engineer show that a very good line - C.D. on the survey - can be obtained at a cost of Rupees 4130, the off take being as at present below the bridge over the Bank Canal, while a new head above the bridge with the new bridge involved would

× No 2636 - 17th Nov 1874.

require

require an outlay of Rupees 12730. Such being the case the cheaper line is that which should be adopted.

3. When the completion estimates were sanctioned, the arrangement of the locks of this Canal was not finally settled, and after further discussion it was decided that a lock should be built at Siddhantum and that the one proposed for Khandavelly should be omitted. The District Engineer transmitted with his letter No. 1598 of the 20th August 1874 revised plans and estimates for the Siddhantum and Kodair locks and the general result was as follows.

Progs. No. 768 - 4th March 1871. Note para 11

Para 16 of note

Progs. 18th April 1877 No. 1077.

	Sanctioned estimate	Revised estimate
Khandavelly Lock	14,400	—
Siddhantum — do —	—	16,480
Kodair Lock	18,570	17,300
	32,970	33,760

Excess Rupees 790.

When approving these estimates the District Engineer

No. 659 - 1st Sept. 1874. Engineer was requested to report the modification of cost and quantity of earth works, which this settlement of the number and position of the locks would occasion, and in a Memo: No. 1058 A of the 15th December last he was asked to submit a complete revised abstract estimate for the Canal in order that all the alterations proposed might receive the formal sanction of Government. In the letter as per margin Major Beatty reported that it would take some months to prepare a complete revised abstract estimate, because there would be extensive alterations in the Dodipetta lock and its channels at the lower end of the canal, and that, as the improvement of this canal formed an important part of the current years work, he had authorized the Range Officer to proceed with the earth works of the first 16 miles and the Siddhantum and Kodair locks and he asked for permission to go on with the lock wears as well. These proposals were approved

No. 3144 of the 11th June 1875

No. 75 - 19th Jany.

approved, but he was told that if a complete estimate could not be got ready at once, a revised abstract for that part of the Canal the details of the arrangements of which had been settled should be submitted, and this has now been done.

× D.O. No. 3862. 12th March 1875

4. The Comparative Statement shows an excess of Rupees 12861 on this part of the Canal, and the principal items are

Earthworks	——	Rupees 5000
Locks	——	4090
Siddhantum Weir	——	3465

The first item is for the most part due to the new head, and it will be seen on referring to the end of para 11 of the note on the estimates that no regular estimate for the earthworks of this Canal were submitted. The excess on locks is supposed to be Rupees 790 when the revised arrangements were approved was found to be 4790 owing to the Amount of the original estimate for the locks having been taken instead of that sum reduced by Rupees 2000 for each lock owing to alteration of size. Subsequently it was found that a reduction of Rupees 700 was practicable in the foundations of the Siddhantum lock, and so the net excess is Rupees 4090. The sanctioned estimate provided Rupees 35 for minor improvements to the Siddhantum lock weir, but as this could not conveniently be adopted to carry the road, and as it is not in line with the site at which the new lock must be built, it was decided, on inspection that it would be preferable to construct a new weir on a better design.

× vide end of para 11 of note.

Progs: 14th March 1874 No. 768.

Progs: 15th July 1874 No. 1906.

latter part of para 41 of Inspection Notes.

5. The District Engineer reports that the Range Officer is of opinion that there will be a saving of Rupees 2000 on the Canal below Kodair but until

until the arrangements shall have been worked out in detail it will not be advisable to take this into account. It may until then be taken to be quite as probable that there will be an excess rather a saving - Altogether then, so far as it at present known, the Canal will cost ——— Rupees. 1,20,761 against a sanction of Rupees 1,07,900 or an excess of 12 per cent. This need not, it is thought, be deemed in any respect unsatisfactory, because it was intimated at the time the completion estimate was sent up that considerable revision would be required, and much of the excess is due to improvements of importance.

6. "In December last the District Engineer submitted a revised plan sections and estimate for 7/4 miles of this Canal below Pennumbra. The Canal had been completed down to 21 miles where originally a lock was to have

Velpur Canal
No. 3030 - 29th Dec.

been built, but on working out the details of the Canal below it was found that by placing the lock 2½ miles lower down and altering the line a saving of Rupees 7,738 on earth works, subsequently raised to Rupees 8062, would be effected, the Canal would be shortened 1 mile, and the level at the crossing of the Bâswaraw Kodu would be raised 8 inches, a change for the better. As to one point, possible change of amount of land compensation, the District Engineers attention was called in the Memo approving of the alterations, and as he has not reported any excess under this head in his letter of the 12th March last No. 3862 with which he has transmitted a comparative statement exhibiting a saving of Rupees 9,280 on certain earth and other works, it seems improbable that there will be any excess. It is to be noticed that the Statement refers only to those works of the Canal which have as yet been taken up and the details settled. The estimate

No. 4016 - 24th March

No. 58 - 13th Jany

for

for these was Rupees 90,960 and the total sanction is Rupees 144,060, but on the whole, judging from the note on the estimate - para 15 - there is no reason to expect excess on the remaining items, though the arrangements for crossing the Buswaraw Kodu have not yet been settled finally. Under these circumstances the sanction of the alterations above detailed is recommended.

7. Taking the two Canals together the net excess is likely to be, so far as can at present be ascertained, Rupees 3,581 and as this is about 3½ per cent on the Bank Canal estimate by itself, there appears to be no necessity for any special sanction. Complete revised estimates for each Canal from

and

15 5

find to end should however be submitted by the District Engineer as soon as possible when such further orders as may appear necessary can be passed.

Colaba mind 28th April 1875

Lt. Col. R.E.
Chief Engr for Irrign

To

The Secretary to Government
P.W.D

Proceedings of the Undaeleenment.

O. R. dept

Read the following

from the Chiefengineer
for Irrigation
G O No: 1388 of 15th May 1875.

The Engineer submitted
entitled by the Chief
Engineer for Irrigation
Also that the result of
certain meetings or discussions
Modifications of the former
16 miles of the Bank Canal
and of 28¼ miles of the
Welfare Canal are that
the former middle cut
Rupees 12861 more, and
the latter Rupees 9280

Dr. 1875 dckt
No 2958.

No 423

From
The Chf Engr for Irrigation
To
The Secretary to Govt
P.W.D.

Dated 28th April
Received 4th May 1875

Enclosures 14

Submits for sanction
certain modifications of the
arrangements for some
of the Canals in the
Western Delta Godavery
Distt.

EC. No: 1388. 15-5-75.

G.O. No: 1871 dt. 367-368.
" 18th April " 220-221.
" 15th July 1874 " 295-296.

No 342

C 5-5-75 (Ex. 11-

less than the amounts sanctioned in the completion estimates of the Western Delta, Godavery and that the net excess is about 3½ per cent on the estimate Rupees 10,79,000 of the former.

2. The particulars given relate to the portions mentioned of the two Canals for which the details have now been worked out, and until the revised abstract estimates for the whole of the works shall have been prepared, the ultimate cost of each will not be clearly known. These abstracts should be completed as soon as possible

Progs. 11th March 1871 No 768.

but in the meantime, the modifications recommended for approval are sanctioned.

GWW

4/
4/-

To The Chief Engr for Irrigation Works
- Dr Engr Kommamuru Fourteen Inches
- Controller

2958/

Govt. of {1875} Madras.

PUBLIC WORKS.

To

The Chief Engineer,
Godavery.

Dated

Issued

Recd. Encl

Abst

G O 15th May 1875, No. 1388

Nos. 342 - 343

Canals in the Western Delta, Godavery District. — The Chief Engineer's modifications of ~~some of~~ the arrangements of some of the _____, sanctioned with remarks.