

(1) Number of pages _____

(2) Date of repair _____

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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	548	Press
B.P. No.		Mis. _____
Dated	25 - 2 - 195	1875

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
25th February 1875.

No 625 Read the following letter from Major J BEATTY, R E, District Engineer, Godavery, to Lieutenant-Colonel J. MULLINS, R E, Chief Engineer for Irrigation, dated Dowlaiswaram, 15th December 1874, No 2,936 —

I HAVE the honor to submit, herewith, the plans, estimates, and reports on the Rali sub-section of the village drainage scheme ordered by Government in their No 980, of 15th April 1874

20 Plans (despatched by banghy)
12 Estimates with reports

2 The group of villages now reported on was selected by the Collector. It is situated in the Amlapur Taluq and in the upper portion of the Central Delta. The number of villages in the group is twelve. The surveys were carried out under the direction of the Range Officer, Mr. Sub-Engineer Ellis

3 The surveys were commenced on the 3rd July 1874, and have been completed within the sanctioned estimate* by one Surveyor and six Lascars assisted by the Range Draughtsman. The work done consisted of the requisite levels and surveys to afford full information regarding the thorough drainage of the group, plotting the out-door work, and devising and estimating the works required. Two copies of all plans, estimates, and reports have been made, i.e., office copies have been kept of all papers now sent.

* Amount Rupees 384

4 Of these twelve villages, three belong to Government, and nine are Zemindari. Owing to the group being situated near the head of the Central Delta and in the higher part of the taluq, they are not so closely surrounded by wet cultivation as villages lower down the delta. Five† of them were found to be in need of drainage, while one, Gopalapuram, specially required it, the other six are now as dry as any villages in a dry taluq

† Veditreswaram, Ketarazpalli, Devarapalli, Mummidiwarapad, Itakota

5 The works proposed are minor street drains with an average section of 4 square feet and main drains with an average section of 7 to 12 square feet, according to the length of the drain. If the main drain is short, a section of 7 or 8 square feet is given, and the longer main drains have a section of 9 to 12 square feet. In addition to the minor street drains, marked with a single blue line on the surveys, and flowing into the main drains which are distinguished by double blue lines, the works include filling in all objectionable pits and hollows about the village, clearing noxious jungle, also, in three cases, masonry works have been considered necessary for the due escape of the drainage. Where the street is broad, it is proposed to dig the minor drain along the centre line, and where it is narrow, along one side. The minor drains receive the drainage of the streets and of any low ground about the village and carry it into the main drains which lead it off from the village site to the nearest natural or artificial branch drain of the delta or into the Godavery.

6 In the case of this group the drainage has been carried to some branch drain of the delta or to the river, but I see no objection to this surface drainage of the village sites flowing into any neighbouring irrigation channel where the full supply level of the channel admits of this being done, and the section of the channel is sufficient to receive it

7. In some cases the improvement of the irrigation branch drain for some distance below the outfall of the main village drain has been provided for

8 The soil excavated from drains within and near the village will be disposed of, as far as practicable, in filling in pits and hollows and improving the section of the streets.

9 The reports which accompany the plans of each village describe in detail what is proposed, which is more briefly as follows —

I — Vedireswaram is low lying, its drainage can be most conveniently led off by one main channel to the Gorinkala, the nearest drainage line of the delta
Vide Plans 1 A and 1 B and Plan 13 A, Fig 2

II and III — Ketarazpalli and Devarapalli have one main drain common to both which receives the street drainage of the two villages and leads it off to the Gorinkala
Vide Plans 2 A and 2 B and 3 A, also Plan 13 A, Fig 5

Vide Plans 4 A and 4 B

IV — The principal main drain of Mummidivarapad also has its outfall into the Gorinkala
V — Itakota being along side the Gorinkala, all street drains naturally flow directly into that great natural drain
Vide Plan 5 A

VI — Gopalapuram being enclosed on one side by the canal and on the other by the river embankment, specially needed drainage. Hitherto it has drained into the delta by a tunnel under the bed of the West Bank Canal. It is now proposed to drain it in the opposite direction by a self acting sluice into the river
Vide Plan 6 A

VII — The drainage of Komarazlanka has hitherto flowed into the delta without any natural or artificial outlet near to carry it off, it is now proposed to lead the drainage into one main duct having its outfall by a sluice into the Godavery
Vide Plans 7 A and 7 B, also

VIII — Ravulapalem has hitherto drained, by breaches in the bank, into the East Bank Canal. It is proposed to lead the street drainage into one main drain which has its outfall into the Amlapur Canal drainage channel, which again flows into the Cowsica. The drainage of a small part of the village, which cannot conveniently be otherwise disposed of, must still be allowed to flow into the East Bank Canal, but through a culvert, instead of an unsightly breach as hitherto.

Vide Plans 8 A and 7 B, also Plan 13 A, Fig 4

IX — Palivela is an ordinary case, and did not specially need drainage. It is proposed to have three main drains, two of which flow into a natural drain called Pondaskodu, a tributary of the Gorinkala, and the third into the side channel of the Gunti and Kottapeta road, which also carries the drainage to the Gorinkala
Vide Plan 9 A, also Plan 13 A, Fig 3

X — Rali is situated on a number of mounds, and does not require street drains, but this village is surrounded by swamps. It is proposed to carry off the drainage of these swamps, by a new main drain, into a tributary of the Gorinkala.
Vide Plans 10 A, 10 B, and 10 C, also Plan 13 A, Fig 1.

XI — Lakshmiopolavaram also stands high, and did not much need improvement. It is proposed to construct two main drains, one on the north and the other to the south of the village, to receive drainage from the minor channels and carry it off to the Gorinkala
Vide Plans 11 A and 11 B

XII. — Podagatlapalli and Ramachendrapur form together one village, which is situated on the right bank of the Gorinkala and close to it. Street channels emptying into the Gorinkala are all that is required
Vide Plan 12 A

10. The total cost of the works proposed will be seen at a glance from the general abstract attached to this letter

11 The Sub Engineer reports that the drainage of Nos I, II, III, IV, V, and VI is urgently needed, that of Nos IX, X, XI, and XII is less urgent, but they will be all the better for it, while VII and VIII are not really in need of drainage, but he also adds that, if all the works proposed are carried out, they will greatly benefit the inhabitants and improve the condition of the villages in a sanitary point of view

12 The people in the villages Nos I, IV, VI, VIII, X, XI are desirous of having the works carried out, while those in Nos II, III, V, VII, IX, and XII have no objection to have the work done for them, but are indifferent about it

13. The first surveys of this section were drawn to a scale of 100 feet to an inch, but in the later ones it was considered better to reduce this to 165 feet to an inch = 32 inches to a mile. The vertical scale is 10 feet to an inch

14 The first plans were thought to be too much covered with letters and figures for clearness, and in the subsequent ones I requested Mr Ellis only to use figures to show the levels and letters at junction or terminal points, and to show distances in a table of references on one side. In order to reduce the work of the Draughtsman I directed that trees should not be shown on the plans, nor any thing done merely to beautify them.

15 Mr Ellis, I observe, has not been careful to use one spelling of names in his plans and reports, but this will be done in future papers of the kind, the orthography of native names in use by the Revenue Survey Department being adopted.

*Proceedings of the Madras Government, Public Works Department,
25th February 1875*

General Abstract showing the Probable Cost of draining the Villages of the Rali Sub-section, Amlapur Taluq, Central Delta

No	Names of Villages	ESTIMATE			
		Earth-work	Masonry Works	Sundry Works, such as clearing Jungle, etc	Total
I	Vedireswaram	Rs 400	Rs	Rs	Rs
II	Ketarazpalli	255		30	430
III	Devarapalli	170		20	275
IV	Mummidivarapad	300		20	190
V	Itakota	50			300
VI	Gopalapuram	590		15	65
VII	Komarazlanka	470	600	60	1,250
VIII	Ravulapalem	520	800	20	1,290
IX	Palivela	470	210	50	780
X	Rali	700		50	520
XI	Lakshmiapolavaram	120		80	780
XII	Podagatlappalli			30	150
	Ramachendrapur.			50	130
	Total	4,125	1,610	415	6,160

DOWLAISHWERAM,
15th December 1874.

(Signed) J BEATTY, Major, R.E.,
District Engineer.

No. 626

Note by the Chief Engineer for Irrigation.
THE District Engineer, Godavery, has submitted estimates, amounting to

* Rali sub-section
Rupees 6,160, for the drainage of a group* of villages in the Central Delta, this group having been selected by the Collector. Of the villages, three belong to Government, and nine are Zemindari. Of the twelve, one greatly requires drainage, five need it, and the other six will, like all other villages in the country, be the better for it.

2 On going over the papers it is found that, in the case of the following villages, the need of drainage is not due to obstruction of the natural outfall by Irrigation Works —

- No 1 — Vedireswaram.
„ 2 3 — Ketarazpalli and Devarapalli
„ 4 — Mummidivarapad
„ 5 — Itakota
„ 7. — Komarazlanka.

- No. 9 — Palivela
„ 10 — Rali.
„ 11 — Lakshmiapolavaram.
„ 12. — Podagatlappalli.

In the case of No 8, Ravulapalem, the drainage of the small part of the village to the north-east of the canal has been obstructed thereby, the rest of the village drainage has not been interfered with. Out of the total of the estimate of Rupees 780 for the drainage of this village, a sluice, Rupees 210, and probably about 40 rupees for earth-works appertain to Irrigation, the rest, Rupees 530, to Miscellaneous.

*Proceedings of the Madras Government, Public Works Department,
25th February 1875*

3. Gopalapuram, No 6, is the only village in which the drainage has been seriously interfered with by the delta works. The amount of the estimate is Rupees 1,250.

4 Of these estimates, then Rupees 1,500 will be chargeable to Irrigation, and, as no very large outlay need be anticipated, as far as I am able to judge, under this head, the work may be provided for under "Revenue, Maintenance, Extensions and Improvements" Rupees 4,660 will remain to be provided for under Agricultural Miscellaneous

[CAMP AT ARCONUM, (Signed) JOHN MULLINS, Lieut.-Col, R.E.,
22nd January 1875. Chief Engineer for Irrigation.

No. 627.

ORDER THEREON, 25th February 1875, No 548

IRRIGATION, No 55

HIS EXCELLENCY the Governor in Council is pleased to sanction the estimates, amounting to Rupees 6,160, for

the drainage of the twelve villages in the Central Delta of the Godavery forming the Rali sub-section, and to approve of the expenditure being provided for in the manner detailed in paragraph 4 of the foregoing Note.

2 It will depend upon the final orders of the Government of India whether funds under Agricultural Miscellaneous will be available in 1875-76.

3 The work chargeable to Agricultural, Revenue, can be gone on with from the Agricultural Repair Grant.

4. The plans show that great care has been taken with the work.

(True Extract)

Colonel, R.E.,

Secretary to Government.

To the District Engineer, Godavery

„ Chief Engineer for Irrigation

„ Controller of Public Works Accounts

Exd A Grubert

-Spare Copies

No 2936 District Engineer's Office, Godavery
Dowlaisheram 15th December 1874
4

From,

Major J. Beatty R. E.
District Engineer Godavery

To,

Lieutenant Colonel J. Mullins R. E.
Chief Engineer for Irrigation.
Madras.

Sir,

I have the honor to submit herewith
the plans, estimates and reports on the Pall
subversion of the village drainage scheme,
ordered by Government in their No 980 of 15th
April 1874.

2. The group of villages now reported
on was selected by the Collector. It is situ-
ated in the Amalapur Taluk, and in the upper
portion of the Central Delta. The number of
villages in the group is twelve. The surveys
were carried out under the direction of the Range
Officer, Mr. Sub Engineer Ellis.

3. The surveys were commenced on the 3rd
July 1874, and have been completed within the

the sanctioned estimate, by one Surveyor and 6 lascars assisted by the Range Draughtsman. The work done consisted of the requisite levels and surveys to afford full information regarding the thorough drainage of the group, plotting the put-door work, and devising and estimating the works required. Two copies of all plans estimates and reports have been made; i.e. Office copies have been kept of all papers now sent.

4 Of these twelve villages three belong to Government, and nine are Zemindary. Owing to the group being situated near the head of the Central Delta, and in the higher part of the Talug, they are not so closely surrounded by wet cultivation as villages lower down the Delta. Five of them were found to be in need of drainage; while one, Gopala-puram specially required it; the other six are now as dry as any villages in a dry Talug.

5. The works proposed are minor street drains with an average section of 4 square feet and main drains with an average section of 7 to 12 square feet, according to the length of the drain: if the main drain is short a section of 7 or 8 square feet is given, and the longer main drains have a section

Amount
Rupees 384

section of 9 to 12 square feet. In addition to minor street drains, marked with a single blue line on the surveys; and flowing into the main drains, which are distinguished by double blue lines; the works include filling in all objectionable pits and hollows about the village; clearing noxious jungle; also, in three cases, masonry works have been considered necessary for the due escape of the drainage. Where the street is broad it is proposed to dig the minor drain along the centre line and where it is narrow along one side. The minor drains receive the drainage of the streets, and of any low ground about the village, and carry it into the main drain which lead it off from the village site to the nearest natural or artificial branch drain of the Delta, or into the Godavery.

6. In the case of this group the drainage has been carried to some branch drain of the Delta, or to the river, but I see no objection to this surface drainage of the village sites flowing into any neighbouring irrigation channel where the full supply level of the channel admits of this being done, and the section of the channel

channel is sufficient to receive it.

7. In some cases the improvement of the irrigation branch drain for some distance below the outfall of the main village drain has been provided for.

8. The soil excavated from drains within and near the village will be disposed of as far as practicable in filling in pits and hollows and improving the section of the streets.

9. The reports which accompany the plans of each village describe in detail what is proposed, which is more briefly as follows.---

I Veditreswaram is low lying, its drainage can be most conveniently led off by one main channel to the Gorinkhala, the nearest drainage line of the Delta.

vide Plans
1 A & 1 B
and
Plan 13 A
Fig 2

II & III Ketaraspalli and Devarapalli have one main drain common to both which receives the street drainage of the two villages and leads it off to the Gorinkhala.

vide Plans
2 A & 2 B
and 3 A, also
Plan 13 A
Fig. 5

IV The principal main drain of Mummidi-varapad also has its outfall into the Gorinkhala.

vide Plans
4 A & 4 B

V Itakota being alongside the Gorinkhala, all street drains naturally flow directly into that.

vide n.d.
Plan 5 A

vide
Plan 6 A

Plan 6 A

Plan 6 A

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X Rale is situated on a number of mounds, and does not require street drains; but this village is surrounded by swamps. It is proposed to carry off the drainage of these swamps, by a new main drain, into a tributary of the Gormkala.

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vide h. 1. Plans 11 A and 11 B

XII Podagatlappalli and Ramachendrapur

vide h. 1, Plan 12 A

form together one village, which is situated on the right bank of the Gormkala and close to it. Street channels emptying into the Gormkala are all that is required.

10 The total cost of the works proposed will be seen at a glance from the general Abstract attached to this letter.

11 The Sub Engineer reports that the drainage of Nos. I, II, III, IV, V & VI, is urgently needed that of Nos. IX, X, XI, & XII, is less urgent but they will be all the better for it, while VII, & VIII, are not really in need of drainage; but he also adds that, if all the works proposed are carried out, they will greatly benefit the inhabitants, and improve the condition of the villages in a sanitary point of view.

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reduce this to 165 feet to an inch = 32 inches to a mile. The vertical scale is 10 feet to an inch.

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15. Mr. Ellis, I observe has not been careful to use one spelling of names in his plans and reports, but this will be done in future papers of the kind; the orthography of native names in use by the Revenue Survey Department being adopted.

I have the honor to be,
Sir,
Your most obedient servant
L. Beatty - Mayor R.E.
District Engineer Godavery

P. W. D.

Proceedings of the Madras Government,
Enter date the

187 .

Read the following. -

548
The Chief Eng^r for Godavery - (H.E. Eng^r 22^d January 1875)

His Excellency the Governor in Council is pleased to sanction the estimate amounting to Rs 6160 for the drainage of the 12 villages in the Central Delta of the Godavery forming the Rali substation; and to approve of the expenditure being provided.

in the manner detailed
in para 4 of the fore-
going note.

2 It will depend upon
the final orders of the
Government of India
whether funds under
Agricultural miscel-
laneous will be avail-
able in 1875-76.

3 The work charge-
able to Agricultural,
Revenue, can be gone
on with from the
Agricultural repairs
grant.

Wm. 27/1/75

G.M.

The Plans show that
great care has been
taken with the work

To the R. & Godavery
- a Chief Eng. for bridge & other works
- a Capt. Insp. of O. & A.
Sept 2-75

D.C. 2275
11-26-1-16 22-2-78

588

Govt. of 1875 Madras

PUBLIC WORKS.

The District Engineer
Godavery

25 Feb 1875. No. 548

No. 625-627

Drainage of Villages in
the Central Delta. Godavery

~~Sanctioning~~ Estimates
amounting to Rs. 6160
for the drainage of 12
Villages forming the Pali-
sub-section and sanctioned
the work chargeable to
Agricultural, Revenue, and
to be gone on with from the
Agricultural Repair Grant.