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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 2108 Press
B.P. No. Mis.

Dated 9-10-1875 196 .

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*Proceedings of the Madras Government, Public Works Department,
21st September 1875.*

Read the following:—

No. 1,049.

No. 513.

Note by the Chief Engineer for Irrigation.

IN Proceedings of Madras Government of the 23rd January last, No. 198, the approximate estimates for the embankments shown by the flood of October 1874 to be necessary for the protection of the whole country lying to the eastward of the Nursimmakondah hill and to the south of the Pennair were considered. Those estimates amounted to Rupees 80,000 and received provisional approval; but, owing to funds not being available, and to the necessity for employing all procurable labor on the anicut works, it was not thought advisable to undertake any of this protective work immediately.

2. The Superintending Engineer has now forwarded for sanction carefully prepared estimates, amounting to Rupees 1,10,400, for the embankments required. There is nothing remarkable about the intended arrangements. Flood level at various points has been ascertained, the differences in surface slope in various miles are probably fully accounted for by the conformation of the river, and by the great variations in the width between the banks. The embankment is to be $4\frac{1}{2}$ feet above this maximum flood level of, at any rate, the last 30 or 40 years. The top width of the bank is to be 6 feet generally, with slopes on either side of 2 to 1, while at places where the circumstances are peculiar, a wider bank with a puddle core, or a wall, will be substituted.

3. The circumstances would have been the better understood had the left or north bank of the river from opposite Nursimmakondah to the sea been shown on the survey, as then the propriety of the proposed alignment of the south embankments would have been more easily seen, but this alignment where no flood bank before existed appears to have been carefully selected, and though some portions of the old flood banks were not well laid out, it does not seem to be necessary to alter them.

4. The country to be protected has an area of about 150 square miles and is for the most part cultivated. It has within its boundaries the chief town of the district, numerous villages, and the whole of the irrigated lands under the Pennair anicut. The inundations by the late floods were very extensive, and it would have been well had the Superintending Engineer obtained some definite information from the Collector as to the extent of damage done by them, on the south side of the river, in support of the large outlay now proposed. My visit to Nellore in February and March last, however, convinced me that the imperfect embankments which had been in existence for several years had exercised a marked influence in preventing the damage from

flood waters on the south side approximating even to that which occurred to the north of the river, and therefore the sanction of the present estimates is recommended provisionally, and the Superintending Engineer should lose no time in obtaining and transmitting the information called for in the Government Order just referred to.

5. The planting of prickly-pear, as proposed at the latter part of paragraph 9 of the Superintending Engineer's letter, is objectionable. Such vegetation is already a sufficient nuisance in many parts of the district, and it is particularly desirable to

*Vide paragraph 42 of notes in Proceedings,
Madras Government, 9th June 1875,
No. 1,612.*

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21st September 1875.*

keep all land washed by the river free from it. There are many other kinds of vegetation, such as grasses, screw pine, palmyras, korakapilly, neernochoy, casuarina, &c., which will stop drift sand.

6. A report is required of the amount which will have to be provided for the emergent work referred to in the concluding paragraph of the Superintending Engineer's letter.

OOTACAMUND, (Signed) JOHN MULLINS, Lieut.-Colonel, R.E.,
14th September 1875. Chief Engineer for Irrigation.

AGRICULTURAL—ORDINARY—ORIGINAL WORKS—MISCELLANEOUS.

ABSTRACT ESTIMATE, No. 4 OF 1875-76.

Nellore District.

WORK.—Constructing a flood bank south of Pennair, east of Nursimmakondah.

Contents.	Description of Charges.	Rate.	Per	Amount.	Total.
4,744½	Cubic yards of earthwork.	RS. A. P.		RS. A. P.	RS. A. P.
11,027½	Do. of do. ...	0 1 0	C. yd.	296 8 4	
9,801½	Do. of do. ...	0 1 1	"	746 10 3	
34,796½	Do. of do. ...	0 1 2	"	714 10 11	
25,428	Do. of do. ...	0 1 3	"	2,718 7 10	
30,846½	Do. of do. ...	0 1 4	"	2,118 13 0	
65,106½	Do. of do. ...	0 1 6	"	2,891 13 6	
52,631	Do. of do. ...	0 1 7	"	6,442 13 6	
47,123	Do. of do. ...	0 1 8	"	5,482 6 4	
10,569½	Do. of do. ...	0 1 9	"	5,154 1 3	
12,307	Do. of do. for breach near Mudiverty-palem.	0 2 10	"	1,211 1 5	
2,373	Cubic yards of puddle wall.	0 11 9	"	1,742 10 9	
19,067	Do. of earthwork ...	0 1 6	"	1,787 8 6	
560	Do. of sand banking.	0 0 10	"	29 2 8	
10,893	Do. of sand banking ...	0 1 0	"	680 13 0	
7,345	Do. of do. ...	0 1 1	"	497 5 1	
6,226½	Do. of do. ...	0 1 4	"	518 13 9	
64,000½	Do. of do. ...	0 1 5	"	5,666 11 6	
15,754	Do. of do. ...	0 1 6	"	1,476 15 0	
41,327½	Do. of do. ...	0 1 7	"	4,089 10 10	
232,658	Square yards of turfing ...	0 0 4	Sq. yd.	4,847 8 0	
73,126	Do. of Rabbit work ...	0 0 4	"	1,523 7 7	
1,481½	Cubic yards of rubble revetment.	2 8 0	C. yd.	3,703 12 0	
908	Do. of gravel for the breached portion of road and over ramps.	0 8 0	"	454 0 0	
	Superintendence and sundries.	5 0 0	Cent.	2,794 0 2	
14	Ramps ...		Each.	150 0 0	
	Planting nanel ...		"		
	Compensation for land ...		"		
	Grand Total ...				59,000 0 0 2,100 0 0 2,000 0 0 4,500 0 0 67,600 0 0

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AGRICULTURAL—ORDINARY—ORIGINAL WORKS—MISCELLANEOUS.

ABSTRACT ESTIMATE, No. 5 OF 1875-76.

Nellore District.

WORKS.—Raising and improving the river embankment on the right bank of the Pennair from Nursimmakondah to the Nellore Anicut.

Contents.	Description of Charges.	Rate.	Per	Amount.	Total.
295	Cubic yards of earthwork.	RS. A. P.	C. yd.	RS. A. P.	RS. A. P.
3,210	Do. of do. ...	0 1 1	"	18 7 0	
2,018	Do. of do. ...	0 1 3	"	217 5 6	
1,198	Do. of do. ...	0 1 4	"	157 10 6	
241	Do. of do. ...	0 1 7	"	99 6 8	
1,807	Do. of do. ...	0 1 8	"	23 13 7	
21,130	Do. of do. ...	0 1 9	"	188 3 8	
34,049	Do. of do. ...	0 1 10	"	2,311 1 3	
39,469	Do. of do. ...	0 1 11	"	3,901 7 2	
23,523	Do. of do. ...	0 2 0	"	4,727 12 10	
3,669	Do. of do. ...	0 2 1	"	2,940 6 0	
12,219	Do. of do. ...	0 2 2	"	477 11 3	
8,375	Do. of do. ...	0 4 6	"	1,654 10 6	
136,426	Square yards of turfing ...	0 0 4	Sq. yd.	949 3 6	
4,803	Cubic yards of rubble pitching ...	1 6 0	C. yd.	2,842 3 4	
1,601	Do. of gravel backing ...	1 0 0	"	6,604 2 0	
324½	Do. of laterite stone in chunam ...	5 0 0	"	1,601 0 0	
47	Squares of pointing ...	2 0 0	Sqre.	1,622 8 0	
167	Cubic yards of puddle wall ...	0 8 0	C. yd.	94 0 0	
	Superintendence and sundries ...	5 0 0	Cent.	83 8 0	
8	Ramps ...			1,505 7 3	
3	Outfall sluices ...			32,020 0 0	
12	Lengthening and improving the existing irrigation and outfall sluices in the line of the embankment.			1,760 0 0	
	Compensation for land ...			750 0 0	
	Planting nanel ...				
	Grand Total...				1,370 0 0 5,400 0 0 1,500 0 0 42,800 0 0

No. 514.

ORDER THEREON, 21st September 1875, No. 2,741.

IRRIGATION, No. 47.

Account.

THE estimates, amounting to Rupees 1,10,400, for raising and extending the flood banks on the right or south side of the Pennair from Nursimmakondah to the sea, a distance of 24.11 miles are sanctioned for entry in the Budget under Agricultural, Miscellaneous, but the provision of funds will depend upon the receipt of full information of the kind referred to in paragraph 3 of G. O., No. 1,612, of the 9th June last, and on the decision which may then be arrived at. It must be noticed that with that order before him, the Superintending Engineer should have had no difficulty in

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21st September 1875.*

understanding what information, as to the effects of the inadequacy of the old flood banks during the recent flood, would be necessary in support of proposals to incur large expenditure. However strong the prima facie grounds may be for the construction of particular works, it is absolutely necessary that whenever the amount involved is considerable great pains should be taken to collect all the evidence available, so that the real importance of the project may be clearly understood, and that its relative importance compared with other schemes may be determined.

2. The report referred to in the concluding paragraph of the foregoing note should be made as soon as possible.

(True Extract.)

Comptroller Major-General, R.E.,
Secretary to Government.

To the Officiating Superintending Engineer, Nellore.

- " Chief Engineer for Irrigation.
- " Controller of Public Works Accounts.
- " Revenue Department.
- " Collector of Nellore.

Exd. E. C. Shunker.

4 Spare Copies *will follow*

Rev: 1875-2 D. H. L.
N. 3881

Gobt. of 1875- Madras.

PUBLIC WORKS.

THE OFFG. SUPERINTENDING

ENGINEER, NELLORE.

&c., &c., &c.

Dated September 21st.

Amount

Rs.

600 7 15

Encl.

G. O., 21st September 1875, No. 2,741.

L. M. M.

SEPTEMBER

Nos. 513-514

Flood banks on the right or south side of
the Pennair from Narsimmakondah to the sea.
— Estimate of Rupees 1,10,400 for raising
and extending the —, sanctioned for entry in
the Budget, under Agricultural, Miscellaneous;
but the provision of funds to depend
upon the receipt of full information of the
kind referred to in paragraph 3 of G. O.,
No. 1,612, of the 9th June last, and on the
decision which may then be arrived at.

N. 2108

Comm. to the
Board of Revenue

9 Oct/75

1 To the Board of Revenue 15 Oct 1875