Archives I—10,006—16-8 77.

(1) Number of pages 26 —

(2) Date of repair 3.12.86

(3) Initials of the Referencer lcug

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

P.W. DEPARTMENT

G.O. No. B.P. No.	1583 W	Press. Mis.
Dated	6.7.1880	~~197~~

MSP

Not to be folded or roughly handled

1583/80
1

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

6th July 1880, No. 1,583 W.

Buildings and Roads.
Civil Works.

Read the following papers:—

No. 21. Endorsement in the Marine Dept., dated 14th June 1880, No. 1,242,

No. 21-A. Note by Chief Engr. for Irrigation, „ 16th „ „ „ —.

No. 21-B. „ „ „ P.W.D., „ 19th „ „ „ —.

No. 22. ORDER THEREON, 6th July 1880, No. 1,583 W.

On the recommendation of the Chief Engineer, the Government approve the proposal made by the Master Attendant for lengthening the groynes at the mouth of the Cocanada river, with a curve towards the north-east, at an estimated cost of about Rs. 10,000 to be borne by Port Funds.

2. The Superintendent of Works will report what means he has at his disposal for making the investigations and for preparing the estimate for further improvements.

3. It is observed that the work now sanctioned is to be carried out by the Marine Department.

(True Extract.)

Major, R.E.,
Under Secy. to Govt., P.W.D.

(13)

To the Superintendent of Works, Godávari.
„ Marine Department.
„ Master Attendant, with Plans.

I xd. E. C. Shunker.
Spare Copies

BUILDINGS AND ROADS,
CIVIL WORKS.

Govt. of (1880) Madras.
PUBLIC WORKS.

To
THE SUPERINTENDENT OF WORKS,
GODAVARI,
&c. &c. &c.

Dated July, 6th.

Issued

Recd. Encl.

G. O., 6th July 1880, No. 1,583 W.

JULY.
Nos. 21-22

Groynes at the Mouth of the Cocanada River.—The proposal to lengthen the — at a cost of about Rs. 10,000 approved.

1583/1

PUBLIC WORKS DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the

Read the following :—

Endorsement in the Marine Dept. — (H. E. No 1242 d) 14th June/80)

Note by the Chief Engr. for Irrigation } H. E. dated 16th — do)

Note by the Chief Engr., PWD (— 19th — do)

On the recommendation of the Chief Engineer, the Government approve the proposal made by the Master Attendant for lengthening the groynes at the mouth of the Cocanada river, with a curve towards the North-east, at an estimated cost of about Rs: 10,000, to be borne by Port Funds.

Copies of the

~~2. The Superintendent of Works will report what means he has~~

Stet

at his disposal for making the ~~necessary~~ investigations, and for preparing the estimate for further improvements. –

3. It is observed that ~~Capt. Taylor proposes to~~ ~~carry out~~ the work now mentioned ~~de~~ is to be carried out by the departmentally Marine Dept. –

4. ~~The Master Attendant will forward the plan of Cocanada river showing the proposed extension to Mr. Walch~~

D 8/7

N 22/6

Supt. of Works, Godavari
Marine Dept. ~~with~~
Master Attendant with plans.

No. 1583 W. B. & Irrig.

PUBLIC WORKS DEPARTMENT 1583

PROCEEDINGS OF THE MADRAS GOVERNMENT. 3

UNDER date the 6th July /80.

Read the following :—

Endorsement in the Marine Dept. (No. 1342) 14th June/80)
Note by the Chf. Engr. for Irrign. (" " 16th do.)
Note by the Chief Engr. P.W.D. (" " 17th do.)

On the recommendation of the Chief Engineer, the Government approve the proposal made by the Master Attendant for lengthening the groynes at the mouth of the Cocanada river, with a curve towards the North east, at an estimated cost of about Rs 10,000, to be borne by Port funds.

2. The Superintendent of Works will report what

what means he has at his disposal for making the investigations and for preparing the estimate for further improvements.

2. It is observed that the work now sanctioned is to be carried out by the Marine Department.

Extt. of Govt's. Cocanada 9
Marine Departt.
Master Attendant
with plans
Despd.
13-7-80

---

4. Note. 1589/4

The Master Attendant's (Madras) opinion as to the practicability of keeping open a canal mouth near Vakalapudi new lighthouse must necessarily carry great weight. The Chart of 1875 shows that deep water is to be found close to the shore near the new lighthouse while to carry the groynes at the mouth of the Cocanada river to only 6 feet soundings would require them to be extended somewhere about 1¾ sea miles.

That an expenditure of 10000 or 15000 Rupees on the extension of these groynes on a curve will improve the navigation need not be doubted but it is ~~my~~ the impression of the undersigned that instead of an average of 600 feet of groyne about 10300 feet would be necessary to secure a permanently good navigation on the present line, and the cost would then be from 1·7 to 2·5 lakhs. If 25 per cent instead of 5 per cent be allowed for Establishment the cost would be 2 to 3·28 lakhs and this does not include plant which would be necessary.

~~I am~~ the undersigned is inclined to think that if the groynes at the mouth of the river could be extended a couple of sea miles the results might be better than those to be obtained from a canal with groynes of sufficient length at its mouth to insure deep water, but probably at least 4 lakhs would be necessary to extend the groynes so far; while the probability is that a Canal of adequate dimensions and with sufficiently long groynes at its mouth could be completed for 1½ lakhs.

Even 4 lakhs would not be an unreasonable outlay to secure good navigation at all times but if 1½ lakhs could be made to secure about equally good results so much the better. The chart of 1875 shows clearly enough how far the river mouth groynes would have to be extended to get to 6 feet soundings, but a special section would be necessary to determine the length of canal groynes to run out into, say, 12 feet of water.

(Sd.) J. M—
Chief Engr. for I.
16-6-80.

1589/6

Administrative Department.

No. 2971

MADRAS,
Marine Office,
19th April 1880.

From

J. H. TAYLOR, ESQ., LIEUT., R.N.R.,
Master Attendant,
Administrative Department,
Madras.

To

R. Davidson Esquire C. S. I.

Chief Secretary to Government,
Marine Department,
Fort Saint George.

SIR,

G. O. No. 130
April 7th 1880
passing orders
on my report
on Cocanada

I have the honor to recommend that the District Engineer of the Godavery, or if his services are not available, the nearest Local Fund Engineer at Cocanada be requested to furnish an estimate for lengthening the groyne at the mouth of the Cocanada river, the North groyne about 500 feet, the South 700, with a curve towards the N. E, as shewn in the chart to be returned.

Sent by
[illegible]

2 The present groynes being composed of stones too small to retain themselves in position in freshes and strong winds, I would respectfully recommend concrete blocks to be made on the spot

of

of about 3 cwts each, to be deposited –
without regard to regularity, but in numbers
sufficient to give the necessary solidity
to the work. The money for the work
to be provided out of the available –
balance of Port Fund.

I have the honor to be
Sir
your most Obedt Servant
W Taylor
Master Attendant
Administrative Department

No. 914

Forwarded to the Public Works Department in view to the estimate required being obtained from the District Engineer.

Chief Secretary
1/4/1880

Ordered 24th April 1880 to the Public Works Dept.

Marine 1880 (Groynes)

From
The Master Attendant,
Administrative Department,
Madras,

R.D.
22 APL 80

To No. 39 of 3
The Chief Secy. to Govt.,
Marine Department,
Fort Saint George.

Dated 19th } April 1880.
Received 22 }

No. 2971
Enclosure.

Recommends the lengthening of the Coconada groynes.

P.O. 974 W 17.4.80

Sheel 38 apr

1580/8

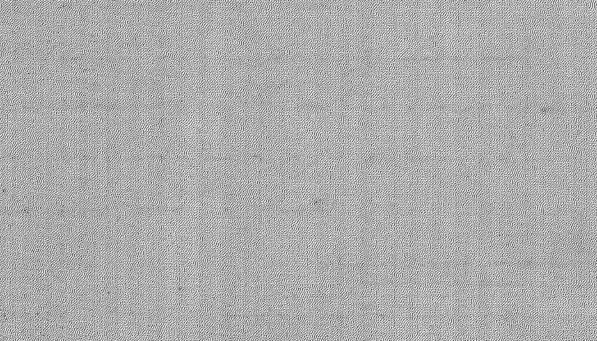
I _ Estimate for Two Rubble Groynes

I Length of groyne - 700 feet Top width 6 feet Height 10 feet
1 to 1, slopes, built on mud bottom
For groyne proper is required, 7 tons of stone per foot lineal
(taking 22 feet to 1 ton)
Add for sinking 2 feet into mud 2 tons — do — do
Total per foot lineal 9 tons
For whole groyne 9 × 700 = 6300 tons at Rs 1-6 — 8662 - 8 -
Add for adjusting top stones 4200 sq ft at 1 — 262 - 8 -
Total Rupees 8925 . .

II Length of groyne 500 feet Section as before
For groynes 9 × 500 = 4500 tons at Rs 1-6 — 6187 - 8 -
Add for adjusting top stones 3000 sq ft at 1 — 187 - 8 -
Total Rupees 6375 . .

For I Groyne — Rs 8925 —
II — 6375 . .
15300 . .
Add 5% for Supervision — 765 . .
Rupees 16065 . . Grand Total

II. Estimate



J. W. Taylor

Marine Dept. 4 June 1880

In [illegible] 347/80

Administrative Department.

N° 4510

Madras 1588
Marine Office
5th June 1880

From

J. H. Taylor Esqre. Lieut R. N. R.
Master Attendant
Administrative Department
Madras

To

R. Davidson Esquire C. S. I.
Chief Secretary to Government
Marine Department
Fort Saint George.

Sir

Returning the letter* of the Chief Engineer for Irrigation, I beg to forward the following remarks

* Dated April 30th 1880 Memo from Chief Engineer P. W. Deptt No 39 dated May 3rd 1880.

2 I have never been fortunate enough on my visits to Cocanada to secure the opinion or advice of the Local Engineers, and on the one occasion of Colonel Mullins and myself being present together when His Grace the Governor visited Cocanada, circumstances interfered to prevent a close inspection of the port. I have therefore accepted generally the responsibility of recommending certain improvements from time to time in this as in other ports which I believe have produced good results hitherto. I have carefully studied Mr Robertson's opinions about Cocanada and Coringa, and as the state of affairs

now

now is very much as he prophesied it would become; I have recommended his obvious expedient of lengthening the groynes, a measure which the Master Attendant and myself from much observation consider the best under the circumstances. A view of the situation from any elevation like the River Lighthouse or Custom House clearly indicates that the mouth of the river is being [illegible] up, and that the remedy for the present at least is to be found in lengthening the groynes, and bringing the shoulder of the South one round so as to keep the silt from the Godavery Channel coming into the river. I have the honor to forward herewith two estimates for the lengthened groynes – one kindly given me by Mr Thorowgood on the basis of the Harbour supply, with the slope he considers necessary and the subsidence to be expected. This, it will be seen, amounts to a moderate sum, but a subsequent report from Coconada as to the actual cost of laterite delivered at the River mouth

very

very much reduces even Mr Thorowgood's. I feel sure the improvement I advocate could be carried to completion, if Departmentally, for Rupees (10,000) Ten thousand.

3 As regards the Canal to Vakalapudi, the project was first brought to my notice by Merchants of Coconada. I had pointed out that if the difficulties they complained of, which were chiefly imaginary did really increase, a Canal round to Vakalapudi, and the introduction of Masula boats might meet them, but on examining the coast near Vakalapudi, I found the beach so flat, and the distance of the ships at anchor so great, that I was convinced that plan would not succeed, to say nothing of the very great increased expense in transit and lost time. The Mercantile Community seem then to have fallen back upon the idea of a Canal of the same general dimensions as the Coconada river, but at right angles to it, to debouch opposite the shipping.

The

The expense of this would be very great, the distance of water carriage would not be diminished, and the labour would be manual instead of as now by sail power. I am of opinion also that all the experience of all the rivers and backwaters in the neighbourhood of Cocanada goes to show that you may expect no help from nature, that the Canal if opening directly to the beach would close except in freshes, and if extended out by Groynes would (in imitation of Wattara and Vizagapatam which have similar natural groynes) soon develop a formidable bar.

4 Colonel Mullins mentions in support of running out groynes the action so far of the Madras Pier, but it is to be observed that they are being very rapidly pushed out into deep water, and no observable effects have as yet been developed, and yet Mr. Parkes himself says it is only a question of time when the usual natural obstruction on these sandy coasts may be calculated upon. At all

all events there are standing examples as warnings I would prefer to call them in the neighbourhood of Cocanada (at present in question) against experimenting on the foreshore. The Chief Engineer has been, I imagine, misled about Vakalapudi. So far from being steep it is as flat as possible, for instance to secure twelve feet of water at a Canal mouth more than a thousand feet of groyne would be required, and the alteration of the Coast line, which he has been also misinformed about, is so marked that the north Boundary pillar of Cocanada Port erected probably not more than 30 years ago, only half a mile south of Vakalapudi, is now a quarter of a mile inland, and buried up among fields and plantations.

5 I have the honor to forward with this letter some maps × for the inspection of the Chief Engineer for Irrigation, and general map showing the new ground in mouth of the Godavery which will undoubtedly

× pencil post.
These maps were returned (the [illegible] attendant.

undoubtedly alter very much the conditions now obtaining in Cocanada Bay, the main stream being now concentrated into this new channel, the minor creeks between Coringa river and Hope Island may be expected to rapidly silt up in fact they are now doing so, while Coringa river may be converted into a sort of Canal fairly navigable at full and change, and requiring only some little attendance and watching.

The prospects of Cocanada seem to me greatly improved by the new action of the Godavery, and a few freshes will doubtless have a marked effect on the extended sand spit on the N.E. extremity.

8 In a letter from the Master Attendant just received he says he is doing his best with the dredge at the river mouth, but until the Groynes are lengthened and turned, despairs of doing much good. I may mention that the revetments inside the river and all works

works connected with improvement of Cocanada have been for some years in the hands of the local Marine authorities under instructions from this office. The Maps sent herewith, which I beg may be returned, are—

✓ 1 Latest Survey with New Mouth
✓ 2 Survey of 1857
✓ 3 Revenue Survey Map shewing the [illegible] river with the Ship-building industries of Coringa and Tallarevu.
— 4 Cocanada River.
✓ 5. Old chart date 1806

I have the honor to be
Sir
Your Most Obedt Servant
W Taylor
Master Attendant
Administrative Department

NMs

No. 1242—

Forwarded to the Chief Engineer, Public Works Department, with reference to his communication No. 39 of 3 May /80.

P.W.D.
25 JUN 80
No.

R. Davidson
Chief Secretary

Ootacamund,
14th June 1880.
To ~~the Chief Engineer Public Works Department~~

Marine (1880) Groyne.

From (Groynes)
The Master Attendant
Admin: Departt.
Madras

P.W.D.
10 JUN 80

To
The Chief Secretary
to Government
Marine Deptt

No. 347

Dated 5th June 1880
Recd. 10 — " —
No. 4510

In 1 letter & 5 plans (12 fos 243 ~~Encl~~ & 216 returned)

Returns the papers relating to the proposed lengthening of the Cocanada Groynes with further remarks.

With Endorsement

Recd. 1-7-80.
Ackg. 25-6-80
Cir. 18.6.80 Rtd 23.6.80.
1 Sheet 15 June

1583
13

24-3-96
16-2-78
4/10/17

~~409 1/3~~

Govt. of (1880) Madras.
PUBLIC WORKS.

To

Dated 7-7-80

Issued

Recd. Encl.

G. O., 6th July 1880, No. 1553 W.

Nos. 21-22

Groynes at the mouth of the Cocanada River. — The proposal to ~~a~~ lengthen the —, at a cost of about Rs 10,000, approved

4/4