Public Works (1897) Department.

2772 W

G.O., No. 816 W

DATED 20th March 1897

[Despatch Abstract.]

Pier at Mangalore Directing the S.E. IV Circle with remarks to submit plans and estimates for a screw pile — giving full details of iron work and other particulars.

[P.W. 25. 5,000—30-11-96.] Te 20-3-97

Indexed. 1/4/97

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

FURTHER PAPERS.

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

Pier at Mangalore

No. 816 W. of 20th March 97

DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

From the Presidency Port Officer No. 1463/349 E of 28.10.9
Order in the Marine Dept. No. 765 of 6.11.96.
From the Supdg. Engr. IV circle No. 107 W of 28.2.97

With his letter above recorded, the Presidency Port Officer submitted a proposal to construct a pontoon pier at Mangalore, at an estimated cost of Rs 31,000, on the supposition that the soil at the bottom of the river was unsuitable to the construction of a screw pile pier. The Ex. Engr West Coast division now shows that there is nothing in the nature of the soil to prevent the construction of a

P. W. 40.
1,000—16-1-97.

permanent screw pile pier, and the Supdg. Engr. is of opinion that the cost of a pontoon pier is out of all proportion to the convenience it would afford to the shipping community, to say nothing of the expense of its upkeep. In these circumstances, the Supdg. Engr. is directed to submit plans & estimates for a screw pile pier, giving full details of iron work & other particulars.

Cs

19/3/97

CWB
13.3.97.

2. The matters referred to in the Ex. Engr's letter No. 95 S.S. of 17th Feby 1897 should receive consideration, and the Collector should be duly consulted thereupon.

Cs

19/3/97

1. Sanctioned.

2. The matters referred to in the letter of the Exec. Engineer 17 Feb /97 should receive consid^n., and the Collector should be duly consulted thereupon.

ASH 16.3.97

17/3/97

Para added for W's notice.
Cs
19.3.97

T/B

S. S. IV Circle with his plans
Marine Dept.

24/3/97

S.a.W.

Public Works (1897) Departmen

CURRENT No. 230

Order

From The Supg. Engineer,
4th Circ

N

Dated 28th February 189

Received 4-3-97

Enclosures (13). ~~7~~. ~~Thirteen~~

Spare copies

SUBJECT.

Pontoon Pier at Mangalore

Reports on the construction of ~~—~~ with his opinion on the subject.

Dw for orders
Cs
6.3.97

A.S. 13-3-97 Asm 17-3-97 R 19-3-97

BACK PAPERS.

No.	Department.	Date.
98	W.O.	9-2-97
14	E.O.	3-2-97
24	E.O.	9-2-97
13	O.	5-1-97
22	E.O.	14-12-96
006	C.O.	10-11-96
765	M.O.	6-11-96
542	M.O.	5-8-96
1965	W.O.	3-7-96
435	M.O.	16-6-96
408	M.O.	8-6-96
1634	W.O.	1-6-96
1032 W		21-4-94
1432 W		26-5-87
171 M		14-3-96
105 E.		28-2-96
58 E		12-2-96
897 W		31-1-96
33 E		27-1-96.
84 M		23-12-95
33 M		29-11-95
317 M		6-11-95
300 M		10-10-95
194-5 M		7-10-95
159-60 M		5-6-95
140 M		20-5-95
91 M		25-3-95
79 M		13-3-95
63 M		25-2-95
419 M		1-11-94
406 M		18-10-94
377 M		21-9-94
297 A. M		26-7-94
296 M		25-7-94
240 M		20-6-94
1353 W		30-5-94

for print for ans 558/97

13-3-95 — [illegible] 352/97

FURTHER PAPERS.

G.O.	No.	Department.	Date.
176		Marine	18-5-94
175		"	
296-7		"	18-5-94
1091 W		P.W.	17-8-92
694 W		"	30-4-94
453 W		"	12-3-94
3277-78 W		"	17-2-94
229-30		Marine	16-12-93
229.	(copy)	"	28-6-92
101 W.	(1 enclos)	P.W.	15-1-89
249	(1 slip)	Rev.	14-6-87
1432 W		P.W.	26-5-87
160-61		Marine	14-4-87
816 W	30-3-99		
1322 W	19-5-99		
565 W			

6357=848 D 1048 D 6654=

3606=15-9 99=7283=1266 D

Marine (1896) Department.

O.W.E.7

CURRENT No. ~~1183~~

10c431

SUPG. ENGINEER'S OFFICE W.D. No. 2/1237 W 12 NOV 96

EXECUTIVE ENGINEER'S OFFICE No. .... P.W.D. WEST COAST DIVISION.

Order

110 WC.

19 FEB 97

3

From, The Presidency Port Off

Madra

No. 1463/349 G

Dated 28 October 1896

Received 30-10-96

Enclosures 6 and 4 Plans

Spare copies

SUBJECT.

Forwarding with rem letter with enclosures from the Collector of South Canara recommendi the construction of a Pontoon Pier at Mangalo

1.—P. No. 153—91.

P.W.D. WEST COAST DIVISION

110 WC.
19 FEB. 97
4/4

Proceedings of a Public Meeting held in the Municipal Hall, Mangalore, on 12th November 1895.

PRESENT:

E. B. Palmer, Esq. *Agent, Bank of Madras, in the Chair.*

Messrs. J. Dell, of Messrs. Pierce, Leslie & Co., H. Menzies, of Messrs. Shepherd and Co., Hr. Altenmuller, General Agent of the Basel G. E. Mission, N. Shiva Rao, Rao Bahadur, K. Rama Rao, S. F. Brito, P. F. X. Saldanha, of Messrs. A. J. Saldanha & Sons, J. L. Fernandes, N. Brito, T. B. Fernandes, Haji Abbu Baker Beary, Khan Bahadur, S. Alvares, Haji Motisham Hassan Sahib, Manockji Nowroji, Alli Khan, P. Vaikunta, J. S. Albuquerque, and others.

Rao Bahadur N. Shiva Rao read the notice convening the meeting, and introduced the Chairman with the following remarks:—

GENTLEMEN,

J

The question of facilitating the landing and *shipping* and *improving* the frontage, of our Bunder was mentioned in the Municipal address of welcome to His Excellency Lord Connemara who honoured this town by his visit in 1888. At the public meeting held in September 1888, you authorised the Municipal Council to represent the matter.

The representation was as follows:—

"The trade of this town is labouring under a great disadvantage owing to the frequent shifting of the bar, which has rendered the river shallow at the usual place of landing and shipping opposite the Customs House, thus making it more inconvenient and expensive than before to convey both merchandise and passengers on boats to the roadstead. To remedy this, it has been suggested that the extension of the Bunder as far as the old Marine Yard, known as the Salt Cotaurs, will by facilitating shipments, save both time and money and thus materially conduce to the prosperity of the town which has been steadily growing in trade, population and industries. We have no doubt that the outlay on this work, will, besides converting an unhealthy and unsightly swamp into valuable ground and improving the frontage of the back-water, yield a uitable return to the state, such as has resulted from a similar reclamation made some years ago on that part of the Bunder which is now the site of important mercantile d other buildings. This project, we beg to suggest, can be carried out with the aid f the local Port Fund, which we understand now amounts to upwards of half a lac of upees. We therefore respectfully beg that Your Excellency may be pleased to anction the reclamation and extension of the Bunder, as above indicated, and thus onfer on this port the boon so greatly needed in the interests of trade."

Since then we applied for the introduction of Act 296 of 1892 under which we to pay fees which have now accumulated to about Rs. 25,000. But nothing subsial has yet been done for the purposes for which the Act was introduced. Therefore s requested to call this meeting to consider what steps should be taken to attain our object. It gave me much pleasure to call this meeting for I had much . d the *first meeting* and had been entrusted with the duty of representing the matter t His Excellency through the Address of Welcome. I may add that subsequently in an interview I had with His Excellency at Madras, the first thing His Excellency asked me was what we had done for improving the frontage of our Bunder.

Now I do not think I need give you any reasons for asking Mr. Palmer to preside at this meeting. You know the great interest he has been taking for the town and its trade for the last 25 years, he has been among us.

The Chairman then addressed the meeting as follows:—

The subject on which I have to address you this evening, will more or less be about the Bar in more senses than one and its shifting qualities, in one respect we Europeans lose our English Holmes', and in another if we do not make some effort we may lose our Trade. I hold a brief for the Mangalore Native Traders from the chief solicitor of this Town's welfare I mean Mr. Rau Bahadur N. Shiva Rau, and I will if you allow me glance over the chief points which I wish to bring to your notice.

You many of you remember Mr. H. S. Thomas as a Collector who displayed every interest in the welfare of Mangalore. Now when he was here his simple, and I say feasible proposition, was to extend our present Bunder to, at least, the salt godowns and to him we owe the grateful shade of the Mango trees now growing on our Bunder. Col. Ross Thompson as early as 1869 showed the frontage required in the plan now before you. Many years after he had left Mangalore a meeting was held in the Sea-Customs office at which Colonel Fraser was present. When the original proposition of Mr. H. S. Thomas was gone into and it was found that in reclaiming the foreshore the value of reclaimed land was almost equal to the cost of reclamations, and Colonel Fraser seemed in favour of our scheme. But, Gentlemen, there is a preponderance of science with the Government and apparently a medium of common-sense. We in our vanity believe we have a preponderance of common sense and no science and we find after a time the simple "*reclamation scheme*" is called "*harbour improvements*," this I take it is an Imperial Work. However *harbour improvement* it was called and another meeting was held at which the introduction of Act 296 of 17th September 1892 was proposed in somewhat these terms. "If you have the act, pay the taxes you will have improvement in your landing and shipping," now this act has been in force for 3 years and we the Traders have paid Rs. 25,000 odd in taxes. I ask you are we benefited in any way? We have a river pier at a small cost originally designed by our Christians to welcome a Bishop, afterwards a slightly improved one to welcome a Governor, but I am given to understand of little or no use to shippers. Why should this be when we have paid enough already to give us a good pier and also carry out our original reclam tion scheme? Why, because Government chose in its wisdom to think we wanted harbour and elected a Specialist to go into the matter, doubtless one of the prominen Irrigation Engineers. But what has resulted? Heavy charges and much science and w have seen an expensive Dredger. To those who have not seen a dredger this was a grand opportunity. It came, we saw it and it went away, but for our money paid in taxes what have *we* received? Why, less than nothing, it reminds me of the odd story of Sir Isaac Newton. When he had a box made for his cat with a door large enou for the cat, but presently the cat had kittens. Ah, said Sir Isaac, we must make a d for the kittens; in his science, he had overlooked common-sense. I am afraid

act III
of 1885
vide G.O.
296 marine
d/17.8.92
Flag D.

all Newtons about what is wanted. We on the spot can see and we have landing and shipping committee who also see, but their hands are tied by Government in their grand schemes, forgetting that our small kitten reclamation can pass easily through the door of the harbour scheme cat, without let or hindrance to their schemes in any way. Only allow our landing and shipping committee to spend the money under the auspices of our Collector Mr. Welsh who has our best interests at heart and a Port Officer whose energies used lately for scientific purposes could well be devoted to improving our sea-customs yard and providing storage for our goods, preserving them against wind and weather, and the low breaking classes who are generally in the lookout at Docks, Customs house and other such places. Now I say we should stir up the Municipality, the landing and shipping committee, and Government, to allow our original scheme of reclamation to go on and show us tax payers we are getting something for our money. I presume that the Bunder could be made as originally intended and indeed I have seen merchants who have volunteered to do some part but objected to on scientific grounds by the Gentlemen whose ultimate duty it is to give a *harbour scheme*, but considered unobjectionable by Marine authorities, the Presidency Port Officer; how can a straight wall interfere with any harbour scheme? My own idea and also of a better man than myself is that the reclamation can be carried out independently and easily with a Priestman's dredger "not a Wenlock." A handy instrument for pier heads or by flat bottomed boat, and wherever it is required there it can work and afford a tangible evidence that something is attempted something done, to earn interest on our funds. a/

The *harbour scheme*, gentlemen, is a purely Government one and as I said before, an Imperial work. Now allow me to give you a few solid facts.—

We have paid in fees Rs. 25,060 since the act came into force in October 1892 *i. e.* 3 years or roughly 8,000 a year, the expenditure has been 2,020 or 800 a year showing a net income of 7,200, *but* 1,270 of this expenditure was for work to find out data for a *harbour*, so that our income can be put down at 8,000; now this if capitalized produces at 4 per cent. 2 lacs quite sufficient for our reclamation and pier,—even should we have one running out to sea. At Alleppy Mr. Crowford the commercial agent ran out a pier of timber which in a short time paid itself and left enough to build an iron pier. a/ Apropos of this subject I may mention that I was honoured by a visit from two officers deputed by Government to enquire, how far Mangalore could be a Tidal Station. They explained what was required for this and we eventually came to the conclusion that this station could only be of service for Tidal guaging by the erection of a pier into deep sea water from the sand-spit opposite the Sea customs office. The trade of Mangalore 's increasing year by year and the Tile industry alone deserves encouragement by being ffered easy means of shipment. I see my friend Mr. Altenmuller present and I am sure that the trade in tiles which he alone carries on is annually increasing and the possession of such an industry alone makes Mangalore known and appreciated. While our total trade is over a million sterling, surely to keep it, let alone extending it, some tangible works should be entered into if only to allay the present feelings of dissatisfaction.

I should wish therefore that our Municipality, the landing and shipping Committee and Government be addressed with a view either to the repeal of the Act 96 of 17th September 1892, or that our wishes originally expressed may meet with ractical attention.

Mr. P. F. X. Saldanha moved the first resolution:—"That in the this meeting there are at present sufficient funds collected at this port as landing and shipping dues, to carry out the improvements to the Bunder which were originally intended;" and proposal that two proper piers be at once constructed to facilitate the landing and shipping of cargo.

The proposition was seconded by Mr. Dell and carried.

Mr. Nowroji then proposed—"That the Collector be moved to address Government for the purchase of a small dredger fit for work at this port and also useful in connection with the reclamation of the Bunder."

Mr. Dell then addressed the meeting again on the subject of piers and the emergency of the same for the trade of the coming season so near upon us. He also remarked that it was unadvisable to ask for too many things at the same time as that may prejudice our claim for the piers.

Rao Bahadur N. Shiva Rao then remarked that the dredger of the kind mentioned by the Chairman will be also useful to make a passage for the loaded boats as sand accumulates across the river preventing boats at low tide from proceeding. If necessary, he said, the resolution may be amended by adding the words "when funds allow" after the word "purchase" in the resolution. The Chairman then remarked funds could be easily secured by loans on the security of the port dues.

After some further discussion the proposal was seconded by Mr. S. F. Brito and carried; who then moved the 3rd resolution as follows:—

GENTLEMEN,

Before moving the 3rd resolution which is put in my hands to be proposed for your adoption I am sure I express the sentiments of all present here that our thanks are due to our worthy Chairman Mr. Palmer for putting forward so ably and forcibly what we ourselves have hitherto felt to be our wants that ought to be supplied. Mr. Palmer holding his brief as he told us on behalf of the poor trading public ~~and~~ I am sure it would not have been entrusted to a better advocate. He made a very strong case for the immediate putting up of two strong piers running out into deep water suitable both for passengers and goods and also for the purchase of a handy dredger to make our river navigable by removing the silt that is or may be deposited here and there in our river. He has also pointed out that the silt removed would with advantage be used to reclaim land in line from the Salt Kottars down to the spot where the present petroleum store stands and that the value of the land then reclaimed will pay the cost of such reclamation and to a great extent the price of the dredger. Having all the statistics and other facts that would go to support our request to the authorities at his finger ends, I think it would be our wise policy to entrust the matter wholly to Mr. Palmer and therefore beg to propose the 3rd resolution.

Mr. S. F. Brito proposed the 3rd resolution—That the Chairman be authorised to address the authorities concerned on the subjects discussed at this meeting.

In seconding the resolution Mr. J. L. Fernandez said—

I have much pleasure in seconding this proposition for this reason in particular. It is well known to one and all of us here present that Mr. Palmer is President of ou standing committee for the extension of Railway Communication to this Port. How h

---

1.—P. No. 153—91.

this larg
as yet in an embryotic state,
its execution are a source of
Any other intermediate minor project
its object the mitigation of the hardships to which the trading
of this town and its inhabitants are subject by reason of the above delay, is, I am sure, likely to have the hearty sympathy of one who has in many respects identified his interest with ours and worked steadily for our common good. I hope therefore that we may safely and advantageously entrust our present wants to Mr. Palmer by giving him what I may call a sort of "General Power of Attorney" to represent our wants to the authorities concerned.

The meeting then closed with a vote of thanks to the Chairman.

E. B. Palmer,
Chairman.

resolution:—"That in

landing and

P.W.D.
WEST COAST DIVISION

Enclos 1
Lr an 1183/96

Ows. # 1
~~10013/96~~
2305/97

Enclosure No. II

In a letter from the Collector of South Canara to the Chief Secretary to Government, Marine Department, Fort St. George, dated 2d November 1895

Current No. 2709/rev of 95.

P.W.D.

ENGINEER
110WC.
19 FEB. 97
5

ENGINEER'S OFFICE, P.W.D.
12 NOV. 96

Extract from the Proceedings of a General Meeting of the Landing and Shipping Dues Committee of the Port of Mangalore held on the 16th November 1895.

19 FEB. 97

Extract from the Proceedings of a General Meeting of the Landing and Shipping Dues Committee of the Port of Mangalore, held at the Collector's Office on Saturday the 16th November 1895.

Present:-

W. H. Walsh, Esquire, President.
Captain J. M. Simpson, Port & Customs Officer.
F. Noone, Esquire.
H. Menzies, "
D. Vas, "
Khan Bahadur Haji Abu Bakar Beari.

---

5. Read President's Memo, dated 23rd Septem 1895, about the advisability of addressing the Presidency Port Officer regarding the investme of the present surplus funds to the credit of the Port Committee in Government Paper.

Read also letter of Chairman of the Public Meeting of 12th November 1895.

Resolved that Government be asked t permit the surplus to be invested in Governm Paper pending Govt. decision as to the applica of the said funds and further to permit the

Committee

Committee to put into practical shape the proposal of the Public Meeting to make a screw pile pier, calling for Estimates, &c.

(Signed) W. H. Welsh.
President

(True Extract)

4/1237W
12 NOV. 96

J. Welsh
Collector.

Compd
J
26.11.

Encls 2
Mar 1183/96

6W E. 2
[illegible]/96
2305/97

No. 153—91.

C 107

Marine

12 NOV. 96

1895.

From,

The — Collector of
South Canara.

To,

The Chief Secretary to Government,
Marine – Department,
Fort St. George.
(Thro' the Presidency Port Officer, Madras.)

Dated 28th November
Despd 30th 1895.
Received

19 FEB. 97

Current № 2702 of 95.
Ea 8

ENCLOSUREs (two).

Subject.

Submitting an extract from the proceedings of a General Meeting of the Landing and Shipping Dues Committee on the subject of a Screw pile pier

No. 24 - 93. 200.

Current № 2709 of 95.
Eng:

SOUTH CANARA COLLECTOR'S OFFIC

Mangalore, 28th November 1895.

From

W. H. Welsh, Esquire,
Collector of
South Canara,

SUPD. 110 WC
19 FEB 97
6.

To

THE CHIEF SECRETARY TO GOVERNMENT,
Marine Department,
Fort St. George.

(Through the Presidency Port Officer.)

Sir,

I have the honor to submit for the orders of Government the accompanying extract from the Proceedings of a General Meeting of the Landing and Shipping Dues Committee, held on the 16th instant.

2. The necessity for a pier at the landing place has long been felt and it was by no means a small convenience to the public when a wooden Jetty which had been improvised during His Excellency the Governor's visit in 1893 was made over to the Committee and improved. The Jetty is however useful only for passengers and their baggage, not being strong enough for cargo or for cargo boats to make fast to.

3. It has been remarked that it is a piteous sight to see women coolies wading in water and slime up to their waists or armpits when carrying cargo from boats to shore and vice versa. An iron screw pile pier is the remedy suggested. Such a pier could be transferred to another site if Government should hereafter find its position to be inconvenient for other operations.

4. It is especially for landing heavy packages tha this need is felt. For instance on the 19th instant

carriag

carriage in a case weighing $12\frac{1}{2}$ cwts had to be carried by twenty coolies. Casks and bales weighing 7 to 10 cwts have frequently to be so dealt with. A crane requires to be fixed at the end of the proposed pier.

5. The people think it hard that the money levied to facilitate landing and shipping should not be at present spent in facilitating landing and shipping. Minutes of a public meeting have been sent to me and they are submitted herewith to show the wishes of the traders, although their proceedings do not commend themselves to me in their entirety.

6. If Government is pleased to approve of definite proposals being made they will be submitted accordingly for utilizing the funds and perhaps for making a temporary investment of part of them in Government Paper.

I have the honor to be,
Sir,
Your Most Obedient Servant,

A. W. Welsh
Collector.

5/1237 W
12 NOV 96
FOURTH C

6/4964 W

Compd
/7
26.11.

Enclos 3
Lr 1183/56

Ords 3
~~1083/5~~
2305/97

Burn & Co., Ld.

No. HQ
4374

Howrah Ironworks
Howrah, 11. 9. 96.

1101 W C
19 FEB. 97
7

To
The District Engineer,
South Canara,
Udipi.

Dear Sir,

In reply to your No. 291/M of 21st August

We have pleasure in sending you herewith the following detailed plans of the proposed landing stage at Mangalore.

Drawing No. 12687 shows general arrangement
" " A shows detail of on
40 ft span of gangw
" " B shows detail of on
small pontoon
25' × 9' × 3'-0"
" " C shows detail of la
pontoon 57'-6" ×
15' × 4'-0"

We quote you for the following items:

Five 40 feet spans of gangway ironwor as per drawing No. 12687 A with Handrai and all deck and hinge bolts, but n woodwork. Also a shore connectio

wit

with anchor bolts for securing the 1st span to the Bunder wall.

Four small pontoons 25ft × 9ft × 3ft made entirely of plate steel and angles no woodwork required. To be fitted with chain pipes and riding bollards for adjusting mooring chains. Each pontoon to be supplied with 2 lengths of 70 feet each × 1" cable and two 5 Cwt anchors. Suitable W. I. Brackets with C. I. bearings are provided for bearings of each span of gangway.

One large outer pontoon 57'.6" × 15' × 4' to take the last span of gangway on suitable W. I. Brackets rivetted to its side. Hull and framing to be made of steel throughout as per drawing No. 12687/C. The wood decking would require to be supplied by you as suggested in your No. 53/M. Along with this pontoon we supply 4 lengths of 1¼" cable each 100 ft long and four 12 Cwt anchors also 4 double C. I. mooring bollards for cargo boats coming alongside, and 4 circular man-holes for entrance to inside of pontoon.

22800
8500
31,300

Our price for the above iron work which would be erected complete in our yard, have erection marks put on, taken to pieces and C.f.c. Mangalore Rs 22,800/- (Rupees twenty two thousand and eight hundred) as per detail below.

4 small pontoons and moorings @ Rs 2,200/.	Rs 8,800.
5 Gangways @ Rs 1200	6,000.
Shore connections	200.
One large pontoon	7,800.
	Rs 22,800.

Our price for erection of the above ironwork at Mangalore Rs 8,500 (rupees eight thousand and five hundred). We could deliver into steamer for Mangalore all the above ironwork, 5 months from receipt of order, so as to get it erected when the sea is smooth.

Yours faithfully
(Sd) Burn & Co.
Managing Agents

(True Copy)
(Sd) Illegible
For Collector.

(True Copy)
H. Wheet
Secy for P.D.M.

6/1237W
12 NOV 96
FOURTH CIR

5745 6W
P.W.D.

1183/96

2305/97

Bombay 14" September 189

P. T. No. $\frac{436}{19075}$

110WC
19 FEB. 97
8

The District Engineer,
South Canara,
Udipi

Sir

Re Landing Stage

With reference to your letter No. $\frac{292}{H.}$ of the 21st Ultimo with enquiry for the above we have now the honor to quote you the Sum of ---- Rs29,800, inclusive of delivery Mangalore in pieces as an approximate Sum for the iron and timber work hereafter detailed in a landing Stage 57'-0" X 15'-0" X 4'-0" with gangway about 200 feet in length by 6 ft in width in 5 spans of 40 feet, Supported on pontoons 25'-0" X 9'-0" X 3'-0" in depth.

We would especially draw your attention to the fact that the above quotation is only approximate and that we Should be glad to revise it if we are any where near the Sum of money at your disposal.

In the absence of any particulars, w have quoted for a thoroughly Substantial

Structure, but have not included the anchorage chains & anchors or guide piles for the pontoons, should these latter be required.

The following is a list of items allowed for in our quotations—

Landing Stage – One pontoon stage 57'-0" x 15'-0" x 4ft in depth made of $\frac{3}{16}$" steel, with angle ribs about 24 inches apart. The pontoon to have a covering of $\frac{3}{16}$" steel plate and be divided into at least 3 water tight compartments furnished with manholes.

A timber staging about 3'-6" in height with 2" deck planking would be placed on the pontoon, to which are secured strong timber bollards about 12" x 12"

No standards or chain fence has been allowed for, but could be added f thought necessary.

Gangway – would consist of 5 spans of 40 feet each x 6 feet in breadth. The main girders would consist of two trussed teel rolled beams with bracing between. he deck to be 2" timber bolted to the beams.

The handrail would be of gas pipe with wrought iron standards securely bolted to the planking.

These 5 spans would rest on hinged bearings to allow of the rise and fall of the tide.

One Span of about 24 feet – would rest in the centre of the landing stage, its upper ends hinged to the small pontoons supporting the gangway, and be furnished with a hand rail.

Hinged bearings – Six in number would support the gangway spans, and be forme of a steel shaft with brass bearings.

The whole of the above materials could be ready for shipment in about 5 to 6 months from date of receipt of order.

Erection – We are scarcely in a position to give a lump sum quotation for this but could furnish you with skilled labour, at the following rates:—

Europea

by him wit

"the letters from Messrs. Burn and Co. Calc

European Foreman —— per month Rs 400.

Rivetters per gang —— per day Rs 6-8-.

Skilled labour per man —— do Rs-2-12-.

In all cases the time would count from the date of departure from Bombay until date of return to our Workshops. Travelling expenses would be extra.

We shall be glad to know if our approximate quotation is favourable and also if there is any probability of the work being taken in hand soon.

We have &c.
(Signed) Richardson Cruddas

(True Copy).

(Sd) Illegible
For Collector

(True Copy)

7/1237W
12 NOV. 96
FOURTH C

4/496W
P.W.D.
WEST COAST DIVISION

Presy: Port Office }
Madras October 1896 }

Commander R.I.M.
Presy: Port Officer

Encls 5
mar 11 813/96

C.Ref.No.815(Eng.)
of 1896.

South Canara Collector's Office,
Mangalore, 28th September, 1896.

From

W. H. Welsh, Esq.,
Collector of South Canara,

SUPG. ENGINEER'S
No. 110WC
19 FEB. 97
9

To

The Presidency Port Officer,
Madras.

Sir,

With reference to your letter No.1463/225 C, dated 12 th December 1895, I have the honor to inform you that the District Board Engineer, who had been asked to obtain information from Firms as to a suitable design of a pier and its probable cost, first investigated the possibility of providing a screw pile pier. His opinion is adverse, the bottom of the river not being suitable. Various designs of piers and pontoon piers within the means of the Landing and Shipping Dues Committee have been considered during the last ten months, and the Engineer has taken soundings and examined the foreshore when his other duties left him time for this.

2. Eventually he furnished information to Messrs. Burn & Co. of Calcutta and to Messrs. Richardson & Cruddas of Bombay and has obtained from them estimates for a 200 feet light floating stage and the cost of landing the same at Mangalore. Copies of them are enclosed for your information.

3. After going through the said estimates & discussing the matter, the Committee has, on the 25th instant, passed the following resolution adopting the estimates of Messrs. Burn & Co. who [illegible] have erected similar [illegible] Port Commissioners of Calcutta :--

"The drawings will be forwarded to the Pr
"sidency Port Officer as requested by him wit

"and Messrs Richardson & Cruddas, Bombay.

"The Committee considers that Messrs Burn "& Co's Estimate of Rs.22,800 is reasonable, and "their design meets the requirements.

"Erection. The estimates for erection from "both the Firms are open to objection and it "would be better to arrange for this locally.

"The Committee estimates the cost as fol- "lows:--

"Messrs. Burn & Co's estimate for structure	Rs.22,800
"Timber for the deck of big pontoon and gangway not included in the above . . .	2,000
"Painting	300
"Work on the wall of the quay &c .	1,000
"Labor and materials for erection, "use of crane and ground for "purpose, &c, ...	4,000
"Engineer's supervision including "his office and all contin - "gencies..	900
	31,000

"The Estimate includes everything except "variations and market rates for steel and iron.

"Messrs. Burn & Co could deliver materials " into steamer for Mangalore five months from "receipt of order. The Committee requests that "sanction may be given in time so that the ma- "terials may be received before next S.W.Monsoon."

The above quoted sum of Rs.31,000 is in- clusive of freight and insurance charges. The Committee ill have a much larger balance next May and can pay this sum.

4. The drawings submitted by Messrs. Burn and Co. e been retained here and will be produced for your in- ction when you visit this Town on 4th Proximo if you

5. The Committee recommends that Government may be pleased to order it to arrange for the erection of the stage locally. The District Board Engineer will be requested to prepare an estimate and submit proposals for executing it.

I have, &c.,

Signed--(illegible)

For Collector.

(True Copy)

Commander, R.I.M.,
Presy: Port Officer

Supdg. Engineer's Office P.W.D. No. 8/12 37W 12 NOV. 96 Fourth Circle

Executive Engineer's Office No. 3/496 W P.W.D. West Coast Division

(True copy)

H. A. Street

Commander R.I.M.

Presy. Port Officer

Encls 6 / mar 11/83/96

Orc 6 / [illegible] 5/97

No. 1463/349 G

Presidency Port Office,
Madras, 28th October, '96.

From

Commander H. A. Street, R.I.M.,
Presidency Port Officer,
Madras,

To

The Secretary to Government,
Marine Department,
Chepak.

110 WC 19 FEB. 97 10

Sir,

I have the honor to forward herewith a letter addressed to Government "through the Presidency Port Officer", from the Collector of South Canara No.2709 (Eng.) dated 28th November 1895, recommending the construction of a Pier at that port. As this letter was unaccompanied by any sketch and specification of the structure recommended, the Collector was requested to supply this office with the same. These documents have now been sent to me together with another letter from the Collector addressed to this office (copies of these with plans are herewith forwarded) in which a Pontoon Pier is suggested instead of the screw pile structure proposed in the letter to Government above quoted, and I beg to submit this latter proposal for the favorable consideration of Government. The cost of the Pontoon Pier is estimated at Rs.31000/. which it is proposed to meet from the Landing and Shipping Dues Fund. The balance to credit of this Fund on 30th September 1896 was Rs.20,475 only, but by May next the Landing and Shipping Dues Committee anticipate a much larger balance which will cover the expenditure on the Pier. In the meantime the difference could be met by a loan from South Canara District Port Fund.

2. The question was put before His Excellency the Governor by the Collector, and was fully gone into by me while

with [illegible] [P. W. 40. 2,000—6-8-96] original.

while at Mangalore in the beginning of this month, and, in my opinion, a Pontoon Pier of the description proposed would answer the purposes for which a Pier is required at Mangalore better than a screw pile structure.

3. It is proposed to have the work carried out under the supervision of the District Board Engineer. P?

4. The site fixed for the Pier is that now occupied by the old wooden structure referred to in G.O., Marine, No.408, dated 8th June 1896. Flag B

5. As the matter is somewhat urgent I beg that early orders on it may be passed.

I have the honor to be,
Sir,
Your Obedient Servant,

H. A. Street

Commdr:, R.I.M.,
Presidency Port Officer.

9/1237W
12 NOV.96

Executive Engineer's Office
No. 4456W
P.W.D.
West Coast Division.

OW 5-7
6063/96
2305/97

Marine ~~Public Works~~ Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

110 WC
19 FEB.97
2
Fourth C

Read the following

From the Presidency Port Officer,
No. 1463/349 dated 28th October 1896.

Order:— No. 765 Marine d/6th November 1896.

Transferred to the Public W[illegible] department for consideration as to whether [illegible]ntoon pier is the best form to adopt, and for scrutiny of the plans and Estimates. It will further be considered in the Public Works Department whether, if the work is decided on, the execution should not be entrusted to the agency of that Department in preference to that of the District Board.

2. The question of funds will be considered in the Marine Dept. when the project is ready for formal sanction.

(True Extract)

John Crossthwaite Col R.E.
~~Under~~ Secretary

To the Public Works Dept.
with [P.W. 40. 2,000—6-6-96] original.

SUPG. ENGINEER'S OFFICE
No. 1/12376W
12 NOV. 96

P.W.S. E.8 2305/97

Public Works (1896) Department.

CURRENT No. ~~100 H3~~ E.9 2305/97

C/ No. 4004 C of 10th November 1896.

~~Order~~ [illegible]

1/4961W

P.W.D. WEST COAST DIVISION

1237W
12 NOV. 96
FOURTH CIRCLE

Forwarded to the Superintending Engineer V Circle for scrutiny of the plans & estimates and for opinion on the questions whether ~~[illegible]~~ ~~[illegible]~~ a pontoon pier is the best form to adopt and whether the execution of the work should be undertaken by the P. W. Dept.

From Marine Dept.

MOWC
19 FEB. 97
1

No. 765 Mar

Dated 6th November 1896.

Received 6. 11. 96

Enclosures 11 (4 plans)

Spare copies

SUBJECT.

Transferring to the Public Works department letter from the Presy. Port Office recommending the Construction of a Pontoon Pier at Mangalore

Campbell Colonel R.E.
Secretary to Govt.

Cy

Note
4 plans [illegible]
[illegible]

CKPS
7.11.96

11/11/96

B

P.W. 19
1,000—5-8-96.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 95 P.W.

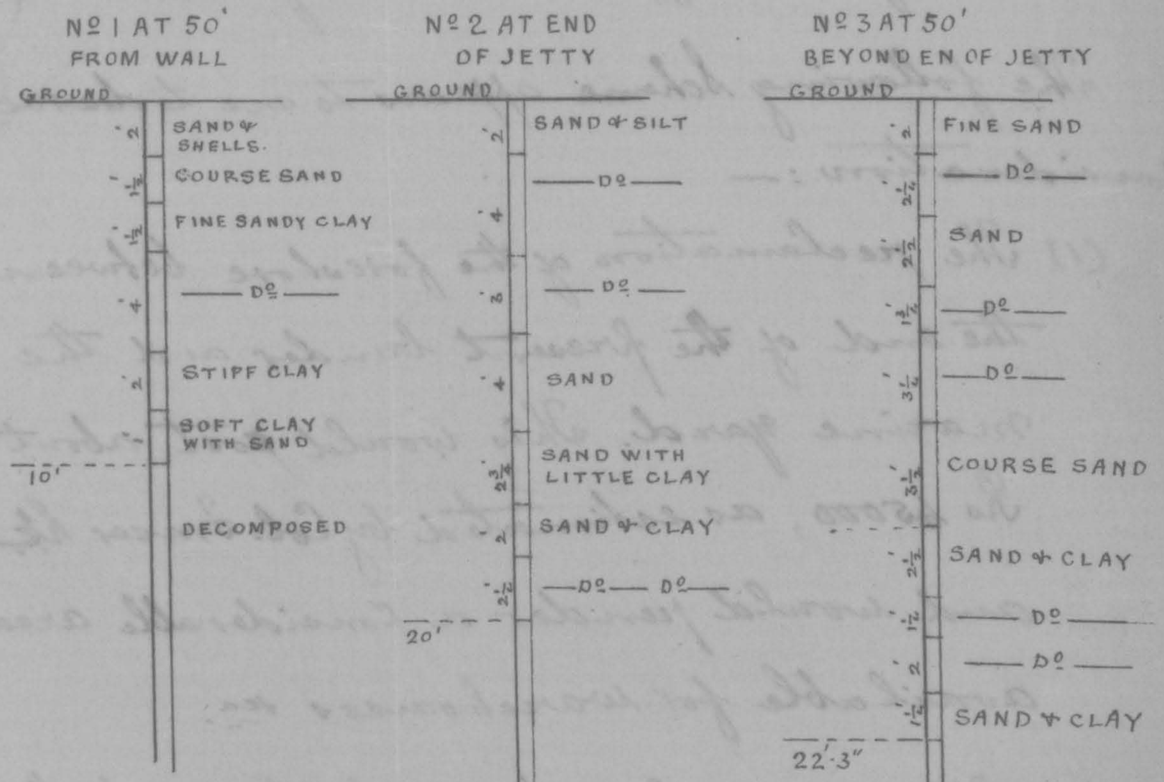
Executive Engineer's office,
West Coast Division,
Calicut, 17 February 1897.

From,
C. W. Wood, Esq.,
Executive Engineer,
West Coast Division,

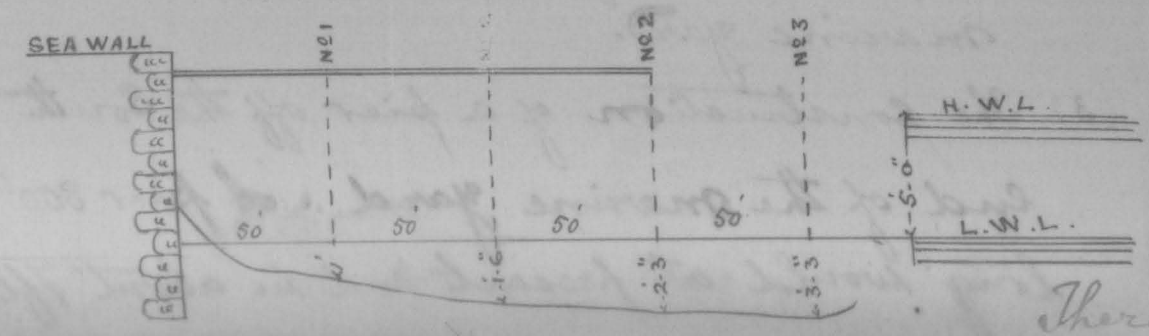
To,
The Superintending Engineer,
Fourth Circle
Coimbatore.

Sir,

In reply to your No. 686/W.C., dated 14th Novr. 1896, I have the honor to submit the result of borings taken along the jetty at Mangalore:—



SECTIONALONG JETTY



There

There is nothing in these borings which shew that the construction of a screw pile pier is not feasible; if the pier were carried to 200 from the sea wall it would end in more than 3' of water and the piles would probably have to be about 24' long.

The chief advantage of a pontoon pier is that not being a permanent structure it could be moved at any time should the present landing place become unworkable or a more suitable one be decided on. From my inspection of the port it seemed to me that the site of the present jetty is not a good one as being too far away from the shipping as the bulk of native craft lie off the marine yard.

The following Scheme appears to me to deserve consideration:—

(1) The reclamation of the foreshore between the end of the present bunder and the marine yard. This would cost about Rs 45,000, as estimated by Col. Fraser R.E. and would render a considerable area available for warehouses &ca.

(2) The removal of the customhouse to the marine yard.

(3) The construction of a pier off the South end of the marine yard. A pier 800' long would at present end in about 7ft of water at low tide level. With dredging the length could probably be made much less The Gurpur backwater has its least width at this place ceteris paribus this is the plac where it would probably be easiest to mai tain the greatest depth should the proposed groynes along the sand spit ever be carried to completion.

I have &ca,

(Sd) C. W. Wood,

Executive Engineer.

(True copy)

Hamman

Supg. Engineer, 4 Circle

It was proposed to construct a pontoon pier — likely to cost Rs 36000 — in preference to a screw-pile pier which might, perhaps, be built for a quarter of the money, to say nothing of the expense of upkeep of the former, on the supposition that the soil was unsuitable for screw-piles. This however has been exploded by Mr Wood, and as some means of communication is absolutely necessary it is submitted that the Supdg Engineer may be asked to submit an estimate for a screw-pile pier giving full details of iron-work etc.

CWBS
11.3.97

JHO 12/3/97

P.W. E.10 / 2305/97

No. 107 / W.

Supg. Engineer's office, 4 Circle,
28th February 1897.

From,
J. Hannan, Esq.,
Supg. Engineer, 4 Circle,

To,
The Chief Engineer,
P.W. Department.

closures 13.
rigl. Endt.
4004C, d/10.11.96
h its 11 Encls.
lans will
ollow.

Sir,

With reference to P.W. Endorsement No. 4004 C, dated 10th November 1896 and G.O. No. 398 W of 9th February 1897, I have the honor to report that on receipt of the above quoted Endorsement I wrote to the Executive Engineer, West Coast Dn. to ascertain and report the nature of the soil in bed of river at site of proposed pontoon pier which was considered unsuitable for the construction of a screw pile pier by the Local Fund Engineer. I enclose you a copy of his reply furnishing the information called for and also giving his opinion on the subject and making certain proposals in which I may say I concur.

You will observe from his letter that there is nothing in the nature of the soil to prevent the construction of a permanent screw pile pier

pier. I am of opinion that the cost of the pontoon pier is out of all proportion to the convenience it will afford to the shipping Community. Rs 31,000 is an excessive price to pay for a gangboard 8 feet wide which probably can only be used when the water is ~~fully~~ fairly smooth. The anchoring arrangements for pontoons will be a nuisance: boats will get foul of them and the pontoons themselves will be liable to get damaged from boats colliding against them. The cost of maintaining the pontoon pier would be very heavy.

I am for the above reasons unable to recommend its construction.

I have the honor to be,
Sir,
Your most obedt. servant,

J Hannam
Supg. Engineer, 4 Circle

PW

These plans are submitted, with refer. to the file about the Mangalore Pontoon ~~bridge~~ Pier, which apparently is with you.

12/3/97

W. Submitted to you yesterday.

12-3-97