

BUILDINGS AND ROADS.
CIVIL WORKS.

Gobt. of (1882) Madras
PUBLIC WORKS.

Dated July, 3rd.

Recd.

Encl.

G.O., 3rd July 1882, No. 1675 W.

JULY.

Nos. 24-25.

Madras Harbour Works.

Completion of the —. The approximate estimate (in abstract) for the —, submitted with remarks, for the information and orders of the Government of India.

Incidental or directly Contingent Works not provided for in the Original Estimate.

ABSTRACT ESTIMATE No. 2.

North Protective Works.

Item Nos.	Particulars.	Cost.
		RS. A. P.
1	Booked Outlay on the North Beach Protective Works at Ráyapuram and Cassemode up to 31st March 1881	1,10,616 8 5
2	Purchase of Mrs. Sadler's land at Ráyapuram	1,400 0 0
3	Compensation for loss and purchase of remaining land at Ráyapuram under G.O., No. 601 W., dated 8th March 1882	51,341 9 2
4	Compensation for loss of four months' rent to Kathir Saib at Cassemode under G.O., No. 1037 W., dated 27th April 1882	240 0 0
5	Probable cost of revetment north of Harbour	36,000 0 0
6	Cost of land at Cassemode proposed in Mr. Parkes's report of 4th February 1882 to be bought, to save the expense of protecting it from encroachment of the sea	2,08,149 0 0
7	Add for compensation and works not included in the above	42,252 14 5
	Total ...	4,50,000 0 0

ABSTRACT ESTIMATE No. 3.

Moorings.

Item Nos.	Particulars.	Cost.
		RS. A. P.
1	Booked outlay on moorings } up to end of 1881-82	1,71,310 6 8
2	Repairs to do. }	3,659 15 10
3	Balance of estimate amounting to Rs. 2,20,750	45,780 0 0
4	Amount assumed for contingencies	14,250 0 0
	Total ...	2,35,000 6 6

ABSTRACT ESTIMATE No. 4.

Intercepting Drain.

Item Nos.	Particulars.	Cost.
		RS. A. P.
1	Booked Outlay on the Intercepting Sewer up to 31st March 1882	34,352 0 0
2	Cost of a pipe to carry sewage from Main Drain near the Fort by the Municipality in July 1879	3,145 5 8
3	Half cost of connecting Drain 5c near High Court with intercepting sewer as directed in G.O., No. 1290 W., dated 22nd May 1882	200 0 0
4	Add for completion and one or two minor junctions and other unforeseen work connected with the intercepting sewer	7,302 10 4
	Total ...	45,000 0 0

ABSTRACT ESTIMATE No. 5.

Outfall Sewer, north of Fort St. George.

Item Nos.	Particulars.	Cost.
		RS. A. P.
1	Extension of outfall sewer near Fort as now being carried out by the Municipality	13,663 0 0
2	Estimated outlay to complete	1,337 0 0
	Total ...	15,000 0 0

Approximate General Estimate for the Madras Harbour Works.

Item Nos.	Particulars.	Cost.
		RS. A. P.
1	Probable ultimate cost as detailed in Abstract Estimate No. 1	75,58,735 0 0
	Incidental or Contingent Works.	
2	Protective Works north of the Harbour	4,50,000 0 0
3	Moorings	2,35,000 0 0
4	Intercepting Drain	45,000 0 0
5	Fort Outfall Drain	15,000 0 0
	Grand Total ...	83,03,735 0 0

No. 25.

ORDER—dated 3rd July 1882, No. 1675 W., Public Works.

Ordered that the following letter be sent to the Government of India.

(Here enter No. 1676 W., dated 3rd July 1882.)

(True Extract.)

(Signed) R. H. SANKEY, Colonel, R.E.,
Secretary to Govt., P.W.D.To the Superintendent, Madras Harbour Works, } with copy of letter to
" Examiner of Public Works Accounts, } Government of India.

J. H. Depp

Exd. A. F. Goodall.

Spare Copies

ENCLOSURE.

INCIDENTAL Expenses in connection with Harbour in reply to Memorandum No. 144 E. of Chief Engineer, Public Works Department, dated Ootacamund, 23rd May 1882.

No.	Particulars of Charge.	Amount.		
		RS.	A.	P.
1	Expenses of setting Memorial Stone by His Royal Highness the Prince of Wales in November 1875	8,654	0	0
2	Channel to carry off rain-water from the drain close to the south pier of Harbour	893	0	0
3	Law charges in connexion with the barque <i>James Aiken</i>	690	9	4
4	Gratuities awarded to relatives of men who died from accidents by the cyclone, &c, of 12th November 1881	5,858	0	0
5	The cost of a pipe to carry sewage from Main Drain near the Fort by the Municipality in July 1879	3,145	5	8
6	North Beach Protective Works at Ráyapuram and Cassemode to 31st March 1881	1,10,616	8	5
7	Extension of outfall sewer near Fort as now being carried out by the Municipality	13,663	0	0
8	Purchase of Mrs. Sadler's land at Ráyapuram	1,400	0	0
9	Theft from cash-chest at office	50	0	0
10	Compensation for loss and purchase of remaining land at Ráyapuram under G.O., No. 601 W., dated 8th March 1882	51,341	9	2
11	Compensation for loss of four months' rent to Kathir Saib at Cassemode under G.O., No. 1037 W., dated 27th April 1882	240	0	0
12	Probable cost of revetment work north of Harbour	36,000	0	0
13	Cost of land at Cassemode proposed in Mr. Parkes's report of 4th February 1882 to be bought in order to save expense of protecting it from encroachment of the sea. <i>Note.</i> —There will probably be interest in shape of rent on this sum	2,08,149	0	0
14	Half cost of connecting Drain No. 5c, near High Court, with intercepting sewer, as directed in G.O., No. 1290 W., of 22nd May 1882, 30 yards	200	0	0
	Total	4,40,901	0	7

(Signed) N. S. B. BEARDMORE, C.E.,
Ag. Superintendent, Madras Harbour Works.

No. 24-C.

Approximate general estimate for the Madras Harbour Works.

Reference.—Government of India letter No. 166 W., dated 9th May 1882.

REPORT.

The annexed estimates giving in abstract as far as possible the approximate total outlay required for the completion of the Madras Harbour Works are based on the actuals of past outlay, and as regards the rest on the best available details.

2. To meet the views of the Government of India the General Abstract divides the whole outlay, past and prospective, into two main heads—

- (1) The Harbour Works proper.
- (2) Incidental or Contingent works.

3. As regards the first head it may be observed that the original estimate for the work sanctioned by the Secretary of State amounted to Rs. 62,80,000, and though containing one item not provided by Mr. Parkes, viz., 2 lakhs, on account of extra rubble required for the bases of the piers, and the usual percentage allowance for "Contingencies," no specific sub-heads were separated under the latter.

4. The amount of estimate No. 1, which provides for the whole of the Harbour Works proper, amounting to Rs. 75,58,735, is, as will be observed, chiefly made up of the two items, (1) booked outlay to end of the last official year, and (2) 18½ lakhs—Mr. Parkes's maximum estimate for completing the work after the storm of the 12th November 1881. If Mr. Parkes's minimum estimate be accepted, the total would be Rs. 72,83,735.

On the Chief Engineer's rough estimate of 25 lakhs for finishing the work, the outlay would be Rs. 82,33,735, and by Mr. Molesworth's of 27 lakhs, Rs. 84,33,735.

5. Estimate No. 2, amounting to Rs. 4,50,000, which is the first of the estimates for the incidental works, is for the protective operations found necessary north of the Harbour. The necessity for the works here has shown itself more and more as the Harbour Works advanced seaward, the effect of the south-west monsoon being to occasion such a set of the alongshore current, as to erode the shore and endanger property to nearly 2 miles north of the Harbour.

6. At first the cost of the works here was debited to ordinary contingencies, Rs. 1,13,624 being the total amount thus booked up to end of last official year. Since then, as will be observed from G.O., 17th March, No. 698 W., the subject has called for separate and careful consideration, the result of which has been that while it has been decided to carry the longitudinal revetment to a certain point north of the Harbour, the sea is to be allowed to act freely on the shore in advance of this—it being clear that it would be cheaper to acquire the rights in the land here than to execute protective works. Hence it will be seen that whereas Items 1 and 5 amount to Rs. 1,46,616, the remaining five items are for compensation.

7. Estimate No. 3 deals with another incidental charge not provided for in the original estimate, viz., the moorings.

8. The actual outlay debited to this head to end of last official year against supposed savings on the general sanction was Rs. 1,74,970, and the remainder of the estimate will have to be met for completion of the work.

9. Estimate No. 4, amounting to Rs. 45,000, for the intercepting sewer provides for a work also not entered specifically in the original estimate. The outlay, Rs. 34,352, as booked up to end of last official year, was treated as debitable to general contingencies of the work, the drain in question owing its origin entirely to the Harbour, for the sole use of which it has been constructed. This drain carries the whole of the sewage (not the storm waters) which formerly discharged into the sea south of, and along the present base of, the Harbour, and delivers it clear of the work to the north.

10. Estimate No. 5, amounting to Rs. 15,000, provides for a work of precisely analogous character and no less intimately connected with the Harbour scheme. It provides for the discharge of the storm waters not entered in Estimate No. 4, but no less essential. The booked outlay to end of last official year was Rs. 13,500, and though at first charged against the general contingencies of the Harbour Works, was not specifically provided for in the original estimate, as sanctioned by the Secretary of State.

(Signed) R. H. SANKEY, Colonel, R.E.,
Chief Engineer, P.W.D.

23rd June 1882.

MADRAS HARBOUR WORKS.
Harbour Works Proper.
ABSTRACT ESTIMATE No. 1.

Item No.	Particulars.	Cost.		
		RS.	A.	P.
1	Booked Outlay up to end of 1881-82	57,17,640	0	0
2	Mr. Parkes's maximum estimate for restoring the Harbour on his monolithic system	18,25,000	0	0
3	Expenses of setting Memorial Stone by His Royal Highness the Prince of Wales in November 1875	8,654	0	0
4	Channel to carry off rain-water from the drain close to the south pier of Harbour	893	0	0
5	Law charges in connection with the barque <i>James Aiken</i>	690	9	4
6	Gratuities awarded to relatives of men who died from accidents during the cyclone of 12th November 1881	5,858	0	0
	Total	75,58,735	9	4

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

No. 24.

READ—the following papers :—

From Colonel W. S. TREVOR, R.E., Secretary to the Government of India, Public Works Department (Civil Works—Miscellaneous), to the Secretary to the Government of Madras, Public Works Department, dated Simla, 9th May 1882, No. 169 M.

I am directed to acknowledge the receipt of your letter, No. 677 W., of the 16th March last, asking for a reconsideration of the orders of the Government of India deciding that the cost of extending the southern main drain across the sands north of Fort St. George should be borne by Provincial Funds.

2. In reply I am to say that, under the circumstances mentioned by you, the incidence of this and other charges will be finally considered as soon as the estimate for the whole of the charges to be incurred on the Harbour Works (including both direct and all incidental charges) is submitted for the sanction of the Government of India, and when the manner in which the further outlay that may be sanctioned is to be dealt with is determined. Until this is done the cost of the extension of the drain and all other similar incidental charges should be met from Provincial Funds.

No. 24-A.

From D. C. GORDON, Esq., Examiner of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 5th June 1882, No. 40 W.

With reference to Government of India No. 169 M., dated 9th May 1882, to Government [copy received under Accountant-General's (Public Works Department) endorsement No. 266 G., dated the 18th idem], stating that the cost of extending the southern main drain across the sands north of Fort St. George and all other indirect charges against the Harbour should be met from Provincial Funds till such time as the revised estimate for the Harbour shall have been fully considered by the Government of India, I have the honor to request that a list of such indirect charges, as have already been sanctioned, may be furnished to me for guidance in making the necessary adjustment, and to inquire whether such adjustment should be made in the accounts for the past or current official year.

No. 24-B.

From N. Sr. B. BEARDMORE, Esq., C.E., Acting Superintendent, Madras Harbour Works, to the Chief Engineer, Public Works Department, dated Madras, 6th June 1882, No. 11 W.

I have the honor to forward the statement requested in your memorandum, No. 144 E., dated 23rd May 1882.

2. I regret there has been some delay in sending this statement, but I did not understand what Item No. 2, "Share of drain lately ordered to connect with intercepting sewer," meant until I had inquired for, and received yesterday, G.O., No. 1290 W., of 22nd May, explaining it.

3RD JULY 1882, No. 1675 W., PUBLIC WORKS.

5

ABSTRACT ESTIMATE No. 5.
Outfall Sewer, north of Fort St. George.

Item Nos.	Particulars.	Cost.		
		RS.	A.	P.
1	Extension of outfall sewer near Fort as now being carried out by the Municipality	13,663	0	0
2	Estimated outlay to complete	1,337	0	0
	Total ...	15,000	0	0

Approximate General Estimate for the Madras Harbour Works.

Approximate Statement of the Estimated Cost of the Proposed Works.										
Item Nos.	Particulars.							Cost.		
	<i>Harbour Proper.</i>							RS.	A.	P.
1	Probable ultimate cost as detailed in Abstract Estimate No. 1 ...							75,58,735	0	0
	<i>- Incidental or Contingent Works.</i>									
2	Protective Works north of the Harbour							4,50,000	0	0
3	Moorings							2,35,000	0	0
4	Intercepting Drain							45,000	0	0
5	Fort Outfall Drain							15,000	0	0
	Grand Total ...							83,03,735	0	0

No. 25.

ORDER—dated 3rd July 1882, No. 1675 W., Public Works.

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(True Extract.)

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Secretary to Govt., P.W.D.

To the Superintendent, Madras Harbour Works, } with copy of letter to
" Examiner of Public Works Accounts, } Government of India.

Paul Repp

Exd. A. F. Goodall.
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BUILDINGS AND ROADS.
CIVIL WORKS. OADS.

Govt. of (1882) Madras
PUBLIC WORKS. Madras.
S.

Dated July, 3rd.

Recd.

Encl.

G.O., 3rd July 1882, No. 1675 W.

JULY.
Nos. 24-25.

Madras Harbour Works.

Completion of the —. The approximate
estimate (in abstract) for the —, submitted
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orders of the Government of India. and