Revenue (1897) Department.

MISCELLANEOUS SERIES.

G.O., No. 2423

DATED 6th June

[Despatch Abstract.]

BACK PAPERS.

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

FURTHER PAPERS.

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

Government {1898} of Madras.

MARINE.

6/1/98

Recd. 28 May } 1898.
Regd. 30 —

Enclosures

Spare copies

G.O., No. 316, 29th April 1898.

G.O. Misc. No. 2423 d/6th June 98.

Communicated to the Board of Rev. (S.R.)

APRIL. KO 4/6/98

[illegible] 6/6/98.

List

To the B^d of Rev. (S.R.) — Despd. 10-6-98

Lighthouse and Port improvements

Orders directing that the Government of India be appealed to for a grant from Imperial funds to admit of the proposed schemes of — being carried out within the period contemplated.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

Read—the following papers:—

From Commander H. A. STREET, R.I.M., Presidency Port Officer, Madras, to the Secretary to Government, Marine Department, dated 19th November 1897, No. 1730/403 G.

With reference to G.O., No. 513, Marine, dated 4th June 1897, I have the honour to forward herewith two statements showing the requirements of the ports in the Eastern and Western groups, respectively, for the next five years as far as can be foreseen at the present moment.

2. The item first entered against each port is what is the foremost in point of urgency, and those entered below it are arranged in the order of their urgency. Taking into account the surplus that is anticipated to stand to credit of each group on 31st March 1898, and reserving therefrom a lakh and a half-rupees, respectively, for the Eastern and Western groups (Madras included in the former) on account of lighthouse improvements, sufficient funds should be available for carrying out the works proposed for execution in 1898–99, as specified in the statement accompanying this office letter, No. 1500/402 G., dated 19th November 1897, besides the dredger and the crane for Tuticorin shown in statement A herewith sent. In regard to the other items, I would propose that, as more money becomes available afterwards, the works be taken in hand one by one in the order of their importance.

From Commander H. A. STREET, R.I.M., Presidency Port Officer, Madras, to the Secretary to Government, Marine Department, dated 14th January 1898, No. 1730/18 G.

With reference to Marine Department memorandum No. 716 E., dated 26th November 1897, I have the honour to forward herewith amended statements showing a forecast of the requirements of the next five years.

2. The works have been arranged in the order pointed out in paragraph 1 of the above memorandum.

3. The entries in the remark column explain the necessity of the works and include a history in each case where one exists.

4. I also forward herewith a statement of estimated receipts and expenditure of the next five years.

Enclosures.

Pilotage Funds—Act X of 1889.

——	Madras.	Pamban and Kilakarai.	Cochin.	Mangalore.
	rs.	rs.	rs.	rs.
Average annual income for 5 years × 5	1,59,590	65,040	15,240	1,640
Deduct—				
Average annual expenditure on establishment } × 5	1,58,875	10,985	11,135	1,605
,, petty maintenance of all kinds }				
Balance available out of income for Major Works ..	715	44,055	4,105	35
Add—				
Balance on hand on 1st April 1897	50,000	15,743	14,931	— 14
Total available in five years for Major Works ..	* 50,715	60,698	19,036	21

* The surplus of Madras Pilotage Fund is annually made over to Madras Port Funds.

Landing and Shipping Dues—Act III of 1885.

——	Vizagapatam.	Coconada.	Masulipatam.	Negapatam.	Mangalore.
	rs.	rs.	rs.	rs.	rs.
Average annual income for 5 years × 5	39,415	2,26,405	15,615	60,085	46,200
Deduct—					
Average annual expenditure on establishment } × 5	5,450	1,18,810	7,005	28,750	5,280
,, petty maintenance of all kinds }					
Balance available out of income for Major Works ..	33,995	1,07,595	8,610	31,335	42,920
Add—					
Balance on hand on 1st April 1897	16,216	3,206	8,675	36,403	31,890
Total available in 5 years for Major Works ..	50,211	1,10,801	17,285	67,738	74,810

Port Funds, Act X of 1889.

——	* Madras.	Eastern Group.	Western Group.
	rs.	rs.	rs.
Average annual income for 5 years × 5 ..	5,99,165	9,58,360	5,17,815
Deduct—			
Average annual expenditure on establishment.			
Average petty maintenance of all kinds. } × 5	4,11,125	8,02,040	4,01,555
,, lighthouse establishment and materials.			
Balance available out of income for Major Works	1,88,040	1,56,320	1,16,260
Add—			
Balance on hand on 1st April 1897	86,917	2,45,682	3,60,600
Total available in 5 years for Major Works including lighthouse construction .	2,74,957	4,02,002	4,76,860

* The surplus of Madras is made over each year to the Harbour Trust Board as contribution from Port Funds.

FORECAST of the requirements of the next five years.

Eastern Group.

No.	Port.	Nature of work.	Approximate estimate.	Amount proposed to be spent yearly.	From what funds to be met.	Remarks.
			Rs.	Rs.		
1	Cuddalore ..	A new boiler for the steam dredger.	1,000	1,000	Port Fund ..	The present boiler having quite recently been condemned it is absolutely necessary to obtain a new one; the actual cost will shortly be reported to Government.
2	Tuticorin ..	Passenger shed and platform alongside of which the train would draw up.	2,700	2,700	Port Fund one-third share only.	On the completion of the new pier at Tuticorin, further improvements connected therewith were considered necessary and, in April 1896, a joint inspection was held by the Presidency Port Officer, Executive Engineer of the division, local Port Officer, Assistant Commissioner of Salt and Abkári Revenue, and the Collector of the district, and a detailed report with regard to this work as well as those numbered 16, 17 and 18 submitted to Government (G.O., No. 798, Marine, dated 11th September 1897).
3	Do. ..	Dredger	30,000	28,000	Port Fund ..	This proposed passenger shed was sanctioned (G.O., No. 1130, Revenue, dated 25th February 1897) and estimate called for (G.O., No. 3200 W., of 16th November 1897, and G.O., No. 974, Marine, dated 1st December 1897).
4	Do. ..	A 15-ton crane ..	5,700	5,700	Do. ..	A large quantity of silt having settled near the new pier, it was first considered that dredging apparatus might, as a temporary measure, be fitted up and silt removed therewith; but as such apparatus would be unequal to the work on the one hand and, on the other, the Dredger "Wenlock's" draft being too great to permit of her working alongside of the pier, and immediate measures being necessary for the removal of silt from near the pier to protect boat traffic from obstruction, it was pointed out as absolutely necessary to have a dredger for this port of the Priestman type (G.O., No. 524, Marine, dated 11th June 1897). The subject is under correspondence with Public Works Department (G.O., No. 826, Marine, dated 22nd September 1897).
5	Do. ..	Residence for the Port Officer.	13,930	5,000	Do. ..	On the completion of the new pier at this port, it was found necessary to have a 15-ton crane fixed on the pier and the purchase of one was sanctioned (G.O., No. 215, Marine, dated 13th July 1895) and orders given to Messrs. Massey & Co., Madras, for the supply of the same in July 1895. The question of strengthening the pier to bear the weight of the crane is under correspondence between the Public Works Department and the contractors (Government memorandum No. 1617 C., of 29th March 1897, and Presidency Port Officer's letter No. 163/171 G., dated 11th May 1897 paragraph 3).
5-A	Porto Novo ..	A new wharf ..	6,000	6,000	Do. ..	In 1894 the general question of residences for Port Officers at coast ports was taken up, and after some correspondence with regard to sufficiency of accommodation, &c., construction of residences at the respective ports is obtaining sanction. Residence for the Port Officer, Tuticorin, was sanctioned in G.O., No. 919, Marine, dated 11th November 1897, at an estimated cost of Rs. 13,930. As to emergency of the execution of the same, see Presidency Port Officer's No. 1678/8 G., dated 7th January 1898.
6	Calimere ..	Quarters for light-keepers.	1,690	1,690	Do. ..	A sum of Rs. 1,290 was provided for repairing the present wharf, but the Superintending Engineer, V Circle, has just brought to notice that the present structure is in a very bad state and that it would be better to have a new wharf than to spend money on the old one.
7	Negapatam ..	Port Officer's residence.	13,900	5,000	Do. ..	In June 1890 the light at Calimere point was exhibited for the first time; and quarters for the lightkeepers were constructed at a cost of about Rs. 2,000. In November 1891 the Negapatam Port Officer recommended that new kutcha buildings might be constructed for the lightkeepers and the old ones used as store rooms. Again, in January 1892, the Port Officer suggested that huts might be constructed on stone basements in consequence of the swampy nature of the soil. In November 1892 the lightkeepers' existing quarters were repaired and three new huts constructed for the families of the men, all at a cost of about Rs. 722. In October 1893 the Public Works Department suggested that a pucka masonry building might be constructed in preference to frequent repairs to existing buildings. Estimates for Rs. 1,644 for permanent buildings were laid before Government, but sanction was declined pending the result of Mr. Ashpitel's deputation by G.O., No. 325, Marine, of 15th August 1894. In 1896 the existing quarters entirely collapsed. Finally an estimate was prepared by Mr. Ashpitel for Rs. 1,350 which was with certain alterations raised to Rs. 1,690 and sanctioned by Government (G.O., No. 1028, Marine, of 14th December 1897).
8	Do. ..	Improvement to the Port Office.	1,000	1,000	Do. ..	See remarks against item No. 5; also paragraph 3 of G.O., No. 1305 W., of 23rd April 1896; G.O., No. 124, Marine, of 13th February 1897; and memorandum No. 1857 C., of 1st April 1897; and No. 4286 C., of 23rd October 1897; and Presidency Port Officer's No. 1678/426 G., of 1st December 1897, explaining the necessity for a residence being built.
9	Do. ..	Permanent groynes in lieu of the temporary ones now in existence.	15,000	5,000	Landing and Shipping Dues Fund.	Plan and estimate forwarded to Government with Presidency Port Officer's letter No. 1832/441 G., of 13th December 1897, which fully explain the necessity for the work being carried out.
10	Pámban ..	Two jetties ..	20,000	*	Port Fund ..	In the interests of the port permanent groynes are considered absolutely necessary in lieu of the existing ones which have proved unsatisfactory.
11	Cocanada ..	Improvements to the bar and half cost of dredger.	2,00,000	*	Do. ..	In view of some 20,000 pilgrims going across to Rameswaram in one month of the year, besides a large number in other months, the question of want of jetties at this port was considered in 1894, and after some correspondence between the Collector of the district and the Port and Public Works Departments, a proposal for two jetties estimated to cost Rupees 30,000 was placed before Government in 1895 by the Presidency Port Officer suggesting the expenditure being met in the first instance from the Provincial Fund (Madura District Port Fund not being in a position then to meet it) and afterwards re-paid from a levy of tolls under Madras Act V of 1863 and Act VII of 1871, the introduction of which was also suggested. Government in memo. No. 1960, Marine, dated 22nd August 1895, enquired if a couple of small wooden jetties would not meet the requirements of the port, as it was considered that a loan from the Provincial Fund of such a large sum was not likely to be available to be re-paid after a number of years which would be the case if it had to be re-paid from the pier toll collections as already mentioned. A final proposal was laid before Government in April 1897 (*vide* Presidency Port Officer's letter No. 1739/123 G.) for two iron screw pile jetties estimated to cost Rs. 20,000. Preparation of plan and estimate has been ordered (G.O., No. 848, Marine, of 30th September 1897).
12	Vizagapatam ..	Improvement to the bar including half cost of dredger.	2,00,000	*	Do. ..	*Vide* correspondence ending with Presidency Port Officer's letter to Government, No. 48 387 G., dated 4th November 1897.
13	Masulipatam ..	Improvements to bar and river.	25,000	10,000	Landing and Shipping Dues Fund.	*Vide* correspondence ending with Presidency Port Officer's letter to Government, No. 48/387 G., of 4th November 1897.
14	Gopalpur ..	Residence for Port Officer.	6,000	6,000	Port Fund ..	The landing and shipping dues committee at this port considered that a dredger was absolutely necessary for the improvement of the port and the matter was laid before Government in December 1894. Government declined to sanction the proposal (G.O., No. 7, Marine, of 10th January 1895). The committee again renewed their application for a dredger in October 1896. It is under consideration to put up a cross bund across the old bar, and the Executive Engineer has been addressed on the subject.
15	Vizagapatam ..	Port Officer's residence.	10,500	9,300	Do. ..	See remarks against item No. 5. See G.O., No. 93, Marine, dated 15th February 1896. " " " 1305 W., Public Works, dated 23rd April 1896. Proposals to purchase a house was made in November 1896. See G.O., No. 812, Marine, dated 23rd November 1896, declining to sanction the purchase and directing to renew the application next year. See G.O., No. 522, Marine of 9th June 1897. " " " 606, " of 7th July " See remarks against item No. 5. " G.O., No. 93, Marine, dated 15th February 1896. " " " 1305 W., Public Works, dated 23rd April 1896. " " " 3278 W., " " 14th November 1896. " " " 833, Marine, dated 1st December 1896.
16	Tuticorin ..	One open shed for goods.	6,700	*	Do. ..	See remarks against item No. 2, "Passenger shed."
17	Do. ..	One closed shed for goods.	10,000	*	Do. ..	
18	Do. ..	Fencing in of foreshore half share of cost.	2,050	*	Do. ..	
19	Negapatam ..	Improvements to jetty.	10,000	2,800	Landing and Shipping Dues Fund.	This proposal originated with the Executive Engineer of the division, who pointed out that there would be a large saving in annual repairs if these improvements were carried out. The report which accompanied the estimate shows this as probable. Plan and estimate for Rs. 2,800 forwarded to Government with Presidency Port Officer's letter No. 540/319 G., of 1st September 1897.
20	Do. ..	Fencing in of foreshore.	4,000	*	Do. ..	This work is considered necessary in the interests of the port.
21	Vizagapatam ..	Improvements to foreshore.	10,000	*	Do. ..	This sum is estimated to meet improvements which may become necessary in continuation of those sanctioned in G.Os., No. 37, Marine of 28th January 1895, and No. 84, Marine, dated 28th January 1897.
*		Total, Eastern Group.	6,96,170	89,190		

N.B.—A lakh and a half of the balance at credit of the Eastern Group Port Funds being reserved for general improvements to the existing system of lights, allotments for the items marked * will have to be postponed as more money becomes available.

FORECAST of the requirements of the next five years.

Western Group.

Number.	Port.	Nature of work.	Approximate estimate.	Amount proposed to be spent yearly.	From what funds to be met.	Remarks.
			Rs.	Rs.		
1	Cochin ..	Port Officer's residence.	30,700	15,000	Port Fund ..	In June 1894 it was proposed to convert the present Port office into a residence for the Port officer and the bungalow in the marine yard as an office. The Executive Engineer, West Coast Division, condemned both buildings and recommended a new building for the Port officer's residence. In the meantime a private building was offered for Rs. 8,000 as best suited for a residence. Anticipating a successful negotiation, estimates were ordered to put the present Port office into thorough repair—G.O., No. 466, Marine, dated 29th June 1896, at a cost of Rs. 1,800. The negotiations failing plan and estimate for a residence were ordered—G.O., No. 584, Marine, of 27th August 1896, but a proposal for a combined residence and office is under consideration—Government Memorandum, Public Works, No. 5247 C. of 4th December 1897.
2	Hangarcotta ..	Lightkeeper's quarters.	1,500	1,500	Do. ..	The work is necessary and urgent. Estimate has been called for and will shortly be placed before Government.
3	Coondapoor ..	Do. ..	1,500	1,500	Do. ..	
4	Malpe ..	Quarters for lightkeepers.	1,500	1,500	Do. ..	
5	Ponani ..	Joining the two existing groynes and filling up the place enclosed.	1,000	1,000	Do. ..	The work is necessary in the interests of the port and figures are approximate.
6	Mangalore ..	Construction of a pier.	2,00,000	* 1,00,000	Landing and Shipping Dues Fund and Port Funds.	At the request of the Landing and Shipping Dues Committee at this port, the Collector recommended in November 1895 the construction of an iron screw pile pier. The Local Fund Engineer of South Canara district expressed as his opinion that the soil was unsuitable for an iron screw pier and recommended instead a 200 feet floating stage. In October 1896, the Presidency Port Officer accordingly recommended a Pantoon pier at a cost of Rs. 31,000 to be met out of Landing and shipping dues. Government in Marine endorsement, No. 86 E., dated 6th February 1897, referred the question for the opinion of Public Works Department. The Executive Engineer, West Coast Division, showed that there was nothing in the soil to prevent a permanent screw pile pier being built. Estimate has accordingly been called for—G.O., No. 308, Marine, of 30th March 1897. As the Executive Engineer also recommended that a portion of the foreshore be reclaimed before commencing the pier, the Landing and Shipping Dues Committee consented to meet the expenses of the reclamation also; and the preparation of an estimate for the latter work also has been called for—G.O., No. 915, Marine, dated 10th November 1897.
7	Do. ..	Reclamation of foreshore.	50,000	25,000	Landing and Shipping Dues Fund.	
8	Calicut ..	Repairs to the present pier.	8,000	8,000	Port Fund ..	The present pier having been placed under the management of "The Calicut Pier and Warehouse Company" in April 1893, the Local Port officer suggested that the pier should be thoroughly repaired to make it safe for the traffic; from that time the subject was under correspondence between the aforesaid company and the Port and Public Works Departments. In 1894 the necessity for repairs to the pier was brought to the notice of Government—Government Memo. No. 878 of 3rd May 1894 and G.O., No. 236, Marine, of 19th June 1894. Again in 1896 the necessity for complete repairs to the pier at a cost of Rs. 25,000 was reported to Government—G.O., No. 648, Marine, of 23rd September 1896. In January 1897 the Presidency Port Officer recommended that a new pier should be built to the south of the site where the present one is situate and estimate for a new one was ordered by Government—G.O., No. 68, Marine, of 23rd January 1897. In view of the fact that a series of 12 sections of the foreshore had to be taken at intervals of a month which meant that no estimate could be formed for 12 or 15 months to come, the Government decided that the present pier should be repaired and ordered preparation of plan and estimate—G.O., No. 364, Marine, of 22nd April 1897. In December 1897 the pier was taken over from the company by the Government—G.O., No. 755, Marine, of 25th August 1897. Estimate for repairing the present pier amounting to Rs. 8,000 was also forwarded to Government in November 1897 with Presidency Port Officer's letter, No. 206/406 G. of 19th November 1897.
9	Do. ..	Construction of a new pier.	2,00,000	* 1,00,000	Do. ..	

10	Malpe ..	Pier and improvements to foreshore.	4,230	* 4,230	Do. ..	The works are necessary in the interests of the port and to facilitate landing and shipping operations. Estimate has been called for and will shortly be placed before Government.
11	Coondapoor ..	Boat jetty ..	7,000	7,000	Do. ..	The work is necessary in the interests of the port and to facilitate landing and shipping operations.
12	Calicut ..	Beacon on Cootee Reef.	1,500	*	Do. ..	The work is necessary in the interests of the port.
13	Cochin ..	Fencing in Boatyard.	970	*	Do. ..	The work is necessary for the protection of the boat yard.
14	Calicut ..	Kallai bar improvements.	6,000	1,200	Do. ..	Act No. II of 1890 was declared applicable to the Kallai Bar and tolls at certain rates were levied on articles passing over this bar for export. The collection and control of this fund was with the Revenue Department. In 1895 it was transferred to the Port Department—G.O., No. 197, Marine, dated 4th July 1895. From that time the collections are credited to Port Fund and the Port Department is responsible for keeping the river and the bar open for traffic. In 1895 the bar was opened by the Port Department at a cost of Rs. 1,618. Again in 1896 the bar was opened at a cost of Rs. 1,120.
		Total, Western Group.	5,13,900	2,65,930		
		Grand Total for both groups.	11,09,070	3,55,120		

N.B.—A lakh and a half of the balance at credit of the Western Group Port Fund being reserved for general improvements to the existing system of lights, allotments for the items marked * will have to be postponed as more money becomes available.

MADRAS,
14th January 1898.

(Signed) H. A. STREET, Commander, R.I.M.,
Presidency Port Officer.

APPENDIX A.

Forecast of requirements for Port Works—Eastern Group.

Item No.	Name of port.	Description of work.	Estimated cost.	Annual cost to Port and Marine funds. 1898–99.	1899–1900.	1900–1.	1901–2.	1902–3.	Total.	Remarks.
			Rs.	Rs.	Rs.	Rs.			Rs.	
1	Cuddalore ..	A new boiler for the steam dredger.	·01	·01	..	..	..	..	·01	
2	Tuticorin ..	Passenger shed and platform.	·03	·01	·02	..	..	..	·03	
3	Do. ..	Dredger or extension of pier.	·30	·30	..	..	..	..	·30	
4	Do. ..	A 15-ton crane	·06	·06	..	..	..	..	·06	
5	Do. ..	Residence for Port officer ..	·14	·10	02	..	..	..	·12	Balance provided in 1897–98.
5 (a)	Porto Novo ..	A new wharf	·06	..	·06	..	..	..	·06	Funds provided in 1897–98.
6	Calimere ..	Quarters for light-keepers.	·02	..	..	..	..	..	..	
7	Negapatam ..	Port officer's quarters ..	·14	·10	·04	..	..	..	·14	
8	Do. ..	Improvements to Port office.	·01	·01	..	..	..	..	·01	
9	Do. ..	Permanent groynes ..	·15	·15	..	..	..	..	·15	
10	Pámban ..	Two jetties	·20	..	·10	·10	..	..	·20	
11	Cocanada ..	Dredger and improvements to bar.	2·00	2·00	..	..	..	..	2.00	
12	Vizagapatam ..	Improvements to the bar, &c.	2·00	..	2·00	..	..	..	2·00	
13	Masulipatam ..	Improvements to bar and river.	·25	·10	·15	..	..	..	·25	
14	Gopalpur ..	Residence for Port officer ..	·06	·06	..	..	..	..	·06	
15	Vizagapatam ..	Do. do. ..	·11	·09	..	..	..	..	·09	Balance provided in 1897–98.
16	Tuticorin ..	Open shed for goods ..	·07	·03	·04	..	..	..	·07	
17	Do. ..	Close shed for goods ..	·10	·03	·07	..	..	..	·10	
18	Do. ..	Fencing foreshore ..	·02	·01	·01	..	..	..	·02	
19	Negapatam ..	Improvements to jetty ..	·10	·03	·07	..	..	..	·10	
20	Do. ..	Fencing foreshore ..	·04	..	·04	..	..	..	·04	
21	Vizagapatam ..	Improvements to foreshore.	·10	·10	..	..	..	..	·10	
		Total ..	5·97	3·19	2·62	10	..	..	5·91	
		Add—Public Works supervision charges at 25 per cent. on all items excepting 1, 3 and 4.		·71	·06	·03	..	..	1·40	
		Total ..		3·90	3·28	·13	..	..	7·31	

Note.—(1) Works for which provision has been made in 1898–99 have been included in the budget for that year.
(2) In the case of item 11, Rs. 50,000 only have been provided in the budget for 1898–99. The balance Rupees 1,50,000 will be provided if India sanctions an additional grant from Imperial funds.

APPENDIX B.

Forecast of requirements for Port works—Western Group.

Item No.	Name of port.	Description of work.	Estimated cost.	Annual cost to Port and Marine funds. 1898–99.	1899–1900.	1900–1.	1901–2.	1902–3.	Total.	Remarks.
			Rs.	Rs.	Rs.	Rs.			Rs.	
1	Cochin ..	Port officer's residence and office.	·30	·15	·15	..	..	..	·30	
2	Hangarkotta ..	Light-keepers' quarters ..	·02	..	..	..	..	..	..	Provided for under light-houses.
3	Coondapoor ..	Do. ..	·02	..	..	..	..	..	..	
4	Malpe ..	Do. ..	·02	..	..	..	..	..	..	
5	Ponnani ..	Joining the two existing groynes.	·01	·01	..	..	..	..	·01	
6	Mangalore ..	Construction of a pier ..	2·00	..	2·00	..	..	..	2·00	
7	Do. ..	Reclamation of foreshore ..	·50	·25	·25	..	..	..	·50	
8	Calicut ..	Repairs to the existing pier.	·08	·02	..	..	..	..	·02	Balance provided in 1897–98.
9	Do. ..	Construction of a new pier ..	2·00	..	..	·05	..	..	·05	Provision has been made for a tramway to the present pier which it is considered will obviate the need for a new pier.
10	Malpe ..	Pier and improvements to foreshore.	·04	..	..	..	..	..	..	Considered unnecessary.
11	Coondapoor ..	Boat jetty	·07	..	·07	..	..	..	·07	
12	Calicut ..	Beacon on Coote reef ..	·02	·01	..	..	..	..	·01	The actual cost being ·01 only, this amount has been provided.
13	Cochin ..	Fencing in boat yard ..	·01	·01	..	..	..	..	·01	
14	Calicut ..	Kullai bar improvements ..	·06	..	·06	..	..	..	·06	
		Total ..	5·15	·45	2·53	·05	..	..	3·03	
		Add—Public Works supervision charges at 25 per cent.		·11	·63	·01	..	..	·75	
		Total ..		·56	3·16	·06	..	..	3·78	

Note.—Works for which provision has been made in 1898–99 have been included in the budget for that year.

APPENDIX C.

STATEMENT showing the Lighthouse works to be carried out by Mr Ashpitel.

Year.	Name of station at which lighthouse is to be constructed.	Estimated cost.	
		Amount.	Total.
	Eastern group.		
1898-99.	Manápaud	0·47	1·43
	Palaco Point Divi	0·91	
	Masulipatam	0·05	
1899-1900.	Sacramento	1·00	1·18
	Vakalapudi	0·18	
1900-1901.	Tuticorin	0·13	1·39
	Pamban	0·05	
	Negapatam	0·05	
	Cuddalore	0·04	
	Santipilli	1·00	
	Kalingapatam	0·05	
	Bimlipatam	0·01	
	Vizagapatam	0·03	
	Gopalpore	0·03	
	Total	..	4·00
	Western group.		
1898-99.	Coondapoor	0·03	1·27
	Hungarikotta (Barkur)	0·03	
	Malpy	0·04	
	Mulki (Kaph)	0·96	
	Mangalore	0·09	
	Muthum	0·12	
1899-1900.	Tangacherri	0·88	0·97
	Cochin	0·09	
1900-1901.	Sacrifice Rock	0·96	1·11
	Cannanore	0·03	
	Tellicherry	0·03	
	Calicut	0·09	
	Total	..	3·35
	Madras.		
1899-1900.	Seven Pagodas	0·53	0·10
	Madras	0·01	
	Pulicat	0·23	
1900-1901.	Armaghan	0·18	
	Above works	..	0·85
	Total	..	0·95

APPENDIX D.

STATEMENT showing Funds required to carry out Lighthouse and other Special Works—Eastern Group.

Year.	Opening balance.			Surplus revenue during the year after meeting all ordinary charges except lighthouse maintenance.			Proposed expenditure.			Grant required (13—12).	Closing balance (12—15).
	Port Funds.	Landing and shipping dues.	Pilotage Funds.	Port Funds.	Landing and shipping dues.	Pilotage Funds.	Light-house works.	Other works.	Total (13+14).		
	1	2	3	4	5	6	7	8	9	10	11
	..	..	..	..	..	..	..	..	..	..	..
1898-99	..	..	..	..	..	..	1·13	3·90	5·03	·95	..
1899-1900	..	..	..	..	..	..	1·18	3·28	4·46	3·61	..
1900-1901	..	..	..	..	..	..	1·39	·13	1·52	·89	..
1901-1902	..	..	..	..	..	..	..	..	..	5·29	..

Year.	Total sum available (5+9).	Light-house maintenance.	Balance available for special works (10—11).	Proposed expenditure.			Grant required (15—12).	Closing balance (12—15).
				Light-house works.	Other works.	Total (13+14).		
	10	11	12	13	14	15	16	17
	..	..	..	..	..	..	..	..
1898-99	4·58	·20	4·38	1·27	·56	1·83	·95	1·55
1899-1900	4·08	·23	·85	·97	3·16	4·13	3·61	..
1900-1901	1·08	·25	·83	1·00	·06	1·06	·89	..
1901-1902	1·08	·27	·81	..	..	..	5·29	·15
1902-1903	..	..	..	..	..	..	2·88	..

Note.—The opening balances are the latest available figures as shown in the budget estimate for 1898-99.

APPENDIX E.

STATEMENT showing Funds required to carry out Lighthouse and other Special Works—Western Group.

Year.	Opening balance.			Surplus revenue during the year after meeting all ordinary charges except light-house maintenance.			Proposed expenditure.			Grant required (13—12).	Closing balance (12—15).
	Port Funds.	Landing and shipping dues.	Pilotage Funds.	Port Funds.	Landing and shipping dues.	Pilotage Funds.	Light-house works.	Other works.	Total (13+14).		
	1	2	3	4	5	6	7	8	9	10	11
	..	..	..	..	..	..	..	..	..	..	..
1898-99	..	·31	·18	·63	·35	·09	·13	·56	·69	·47	..
1899-1900	..	..	..	·63	·36	·09	·09	3·16	3·25	·47	..
1900-1901	..	..	..	·63	·36	·09	·06	..	·06	·47	..
1901-1902	..	..	..	·63	·36	·09	..	..	..	·47	..
1902-1903	..	..	..	..	..	..	..	..	..	·47	..

Year.	Total sum available (6+9).	Light-house maintenance.	Balance available for special works (10—11).	Proposed expenditure.			Grant required (15—12).	Closing balance (12—15).
				Light-house works.	Other works.	Total (13+14).		
	10	11	12	13	14	15	16	17
	..	..	..	..	..	..	..	..
1898-99	5·99	·07	5·92	1·27	·56	1·83	·47	1·55
1899-1900	5·72	·11	3·45	·97	3·16	4·13	·47	..
1900-1901	4·47	·17	4·30	1·00	·06	1·06	·47	..
1901-1902	4·47	·13	4·34	..	..	..	·47	·15
1902-1903	..	..	..	..	..	..	2·88	..

Note.—The opening balances are the latest available figures as shown in the budget estimate for 1898-99.

APPENDIX F.

Statement showing Funds required to carry out Lighthouse and other Special Works—Madras Port.

	Opening balance.	Surplus reserve during the year after meeting all ordinary charges except lighthouse maintenance.	Total sum available (1 + 2).	Lighthouse maintenance.	Proposed expenditure. Lighthouse works.	Proposed expenditure. Other works.	Proposed expenditure. Total (6 + 7).	Balance available for special works (3 — 4).	Grant required (8 — 5).	Closing balance (5 — 8).
	1	2	3	4	6	7	8	5	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1898–99	90	48	138	10	10	..	10	128	..	118
1899–1900	118	48	166	10	86	..	86	156	..	71
1900–1901	..	..	..	..	..	..	..	..	..	..

Note.—The opening balance is the latest available figure as shown in the budget estimate for 1898–99.

Order—No. 316, Marine, dated 29th April 1898.

In accordance with paragraph 2 of G.O., No 513, Marine, dated 4th June 1897, the Presidency Port Officer submits with his letter of the 14th January 1898 read above a forecast of Port Fund works other than lighthouses required during the next five years in each of the two groups, Eastern and Western, into which the ports have been divided. The works are arranged in order of urgency, and a brief history of each, where such exists, is given in the column of remarks.

2. The total outlay is estimated at Rs. 11,09,070, of which the Eastern group absorbs Rs. 5,95,170, and the Western Rs. 5,13,900.

Exclusive of Public Works supervision charges.

3. His Excellency the Governor in Council observes that it is essential to provide in the first instance for the lighthouses, in connection with which a special establishment is actively engaged in the preparation of plans and estimates, the provision of materials and the execution of work. The longer this establishment is maintained, from paucity of funds or otherwise, the more costly will the scheme of lighthouse improvement become.

4. Mr. Ashpitel has drawn up a programme of operations on the construction and improvement of lighthouses extending over three years, the total cost of which is estimated at Rs. 8,30,000 as shown below :—

	Rs.
Eastern group	4,00,000
Western group	3,35,000
Madras	95,000
Total ...	8,30,000

or an average annual expenditure of Rs. 2,76,000. This outlay must be provided for, but due consideration to the development of the ports in the interests of trade is also essential. Both objects cannot be adequately met within a reasonable time from local resources alone. Application will accordingly be made to the Government of India for assistance.

5. The statements given in appendices (A and B) show the revised programme approved by Government for each group of ports and provide for an expenditure of Rs. 7,31,000 on works in the Eastern group and Rs. 3,78,000 in the Western, or a total of Rs. 11,09,000 as compared with Rs. 11,09,070 (or Rs. 13,86,000 inclusive of Public Works supervision charges) proposed by the Presidency Port Officer. The Government is, however, advised that further modification of details may be necessary. The Chief Engineer will report on this point after he and the Presidency Port Officer have had an opportunity of studying local requirements on the spot. The works will, as far as practicable, be estimated for and carried out in the order of urgency here shown. Statement C shows lighthouse works to be dealt with by the special lighthouse division.

6. Taking the Eastern group first, it will be seen from statement D that this group will commence with an opening balance of Rs. 3,50,000 and will require additional grants aggregating Rs. 5,25,000 during the years 1898–99 to 1900–1901.

7. In the Western group, statement E, no assistance will be necessary during 1898–99, but Rs. 2,88,000 will be required during the following two years. Credit is taken for augmentation of Port Fund receipts by Rs. 6,000 per annum which will, it is hoped, be realised by enhancing the port dues to the maximum rates allowed by law, as in the case of the Eastern group, which were raised under the orders contained in G.O., No. 261, Marine, dated 19th March 1897, paragraph 11.

8. In Madras, statement F, the available funds will suffice, but the usual annual contribution to the Madras Harbour Trust Board will have to be withheld till the lighthouse works considered necessary in connection with this port, and estimated to cost Rs. 95,000, are paid for.

G.O., No. 261, Marine, dated 19th March 1897.

9. At ports where landing and shipping dues are collected, the expenditure on port improvements will be a first charge on those funds, and it is only after the landing and shipping dues have been exhausted that the aid of Port Funds can be expected.

10. The Government of India will be addressed on the subject, and the Presidency Port Officer will submit the draft of a notification providing for the enhancement of the port dues at the ports of the Western group.

[Here enter No. 317, Marine, dated 29th April 1898.]

(True Extract.)

S. Rice

Under Secretary to Government.

To the Presidency Port Officer.
,, Public Works Department.
,, Revenue Department.
,, Financial Department.
,, Accountant-General.
,, Chairman, Harbour Trust Board.

End. Md. Pahilwan.

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Order of Government	,,	,,	,,	A	A	A	A	A	A	A
Letter of Government.										
Statement with ditto										
Papers not filed up, being meant for deputation in original.										

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