

Marine (1898) Department.

G.O., No. 803 Marine

DATED 19th Sept 1898.

Have lock point [Despatch Abstract.]

From: R. W. Deft, San Antonio,
Willi-Elmerts, in sketch of the '1550 for
Constructing an underground Water Tank in
Connection with the Light House at ——— in
the Harbor, Communicated to the President
Port Officer.

Indexed.

23/9/98

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
723689	195	Sec.	2-3-99				

Sanctioning, with remarks, an estimate of Rs. 1,550 for constructing an underground water-tank in connection with the lighthouse at — in the Kistna district.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following papers:—

From F. W. ASHPITEL, Esq., Superintendent of Works, Lighthouse Division, to the Secretary to Government, Public Works Department (through the Presidency Port Officer, Madras), dated Madras, 20th May 1898, No. 1038.

I have the honour to forward herewith, for favour of sanction, plans and estimates for an underground drinking-water tank and compound wall in connection with the works now going on at Havelock Point.

No. 188 G.

Forwarded for sanction observing that the tank is a necessity.

23rd May 1898.

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

From F. W. ASHPITEL, Esq., Superintendent of Works, Lighthouse Division, to the Chief Engineer, Public Works Department, dated Madras, 6th July 1898, No. 1135.

With reference to your No. 2990 C., dated 28th June 1898, I have the honour to return herewith the estimate for a drinking-water tank and compound wall at Havelock point with a data sheet for favour of final orders.

2. The gate opens outwards and it was intended to provide a ramp in rear, i.e., inside the compound, in which case the height of the posts appears to be correct.

3. The foundation of the wall has been increased by 6 inches.

4. The iron tanks now at Point Divi are 8 in number and have a total capacity of about 2,900 gallons. An estimate was originally prepared for a double-tiled water-shed, but the cost would be greater than that of the proposed underground tank. If a temporary shed is erected it will, I think, never be satisfactory as the difficulty in obtaining materials for periodical repairs will be very considerable in such an out-of-the-way place. If a shed is preferred I would suggest corrugated iron on old rails as posts, the roof, if necessary, being made double. A corrugated iron shed will be far preferable to the existing system of leaving the tank exposed to the full force of the sun and, if the sides and ends are left open, there will be a free current of air.

The difficulty in sinking a water-tight underground cistern was not lost sight of, and it was only on seeing that the tower wells were practically water-tight that it was finally decided to submit an estimate for an underground tank. The bottom will give the greatest trouble, but I do not think that this difficulty is insuperable as Messrs. Arbutnot & Co. have agreed to manufacture a small quantity of quick setting cement for this work. The concrete will be plastered with cement mortar, 4 cement to 1 sand; the proportion of cement to sand being taken from Mr. Mansetgh's specification level. These manholes, so far as I recollect, were made water-tight without much difficulty.

5. The rate for cement concrete is Rs. 57 in mass and Rs. 74 for block work. The cement has to be brought from Madras; the concrete from Bezvada, with a transshipment from the canal into the river; the sand from a distance of 20 miles. The data sheet gives particulars. The reason for the difference in price of cement plaster in the two estimates is that one is 4 cement to 1 sand as explained above, and the other 1 cement to 2 sand. This information was omitted by an oversight in the original estimate.

From F. W. ASHPITEL, Esq., Superintendent of Works, Lighthouse Division, to the Chief Engineer, Public Works Department, dated Madras, 6th August 1898, No. 1190.

With reference to your No. 3386 C., dated 29th July 1898, I have the honour to inform you that it will be necessary to supply the Kistna lighthouse (Havelock Point) with water from the river at a distance of about $\frac{3}{4}$ mile from the site during six months in the year, and for the rest of the year from the canals distant 10 miles, or from the river at a distance of about 20 miles when the canals are closed. The water will be brought to the site by means of a boat and the tank filled by hand. The charge will be met from the annual maintenance grants as is now done at Divi lighthouse.

2. The estimate for a compound wall was prepared at the request of the Presidency Port Officer, and the wall is designed to exclude from the lighthouse premises pigs and cattle which are turned out on the island by the villagers.

ORDER—No. 2217 W., dated 30th August 1898.

With his letter, No. 1038, dated 20th May 1898, the Superintendent of Works, Lighthouse division, submits for sanction the following estimates for works connected with the lighthouse at Havelock Point in the Kistna district:—

	RS.
(a) Constructing a compound wall with gate pillars and shutters ...	2,100
(b) Constructing an underground water-tank ...	1,550
	<u>3,650</u>

2. Item (a), the necessity for which has not been established, will be disallowed.

3. Item (b) is sanctioned as supplemental to the estimate of Rs. 1,13,240 for the lighthouse and its subsidiary buildings, sanctioned in G.O., No. 670 W., dated 8th March 1897.

4. The expenditure on the project to end of 1897-98 was Rs. 32,225, and a sum of Rs. 83,000 has been provided for it in the current year's budget.

5. The sanction accorded in paragraph 3 has been registered as Excluded Local, No. 19 W. of 1898-99, and classified as Miscellaneous Public Improvements—Original Works.

(True Extract.)

Under Secretary to Government.

To the Superintendent of Works, Lighthouse Division,
with nine enclosures." Examiner, Public Works Accounts.
" Marine Department.

Exd. T. K. Narayana Aiyangar.