

Public Works (1898) Department.

G.O., No.

975-W

DATED

14 April 1898

see copy

work no 5932-198

[Despatch Abstract.]

Doreshore at Jellieberry Pros: marine
Dept passing orders on the subject of the
Construction of protective works for preventing
the erosion of the sea on the —, Comd to S.S.
W Circle for Submission of the estimate referred
to in para 5 of the Proceedings.

T
14.4.98

Indexed.

16/4

To The Buffalo Supr. TV Cncl.
22 West 40 St

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper:—

From C. W. WOOD, Esq., Executive Engineer, West Coast Division, to the Collector of Malabar, dated Calicut, 3rd February 1898, No. 149 M.

With reference to G.O., No. 331 of 6th April 1897, I have the honour to forward herewith a plan of the foreshore at Tellicherry extending from the cemetery near the fort down to the Custom House. This is the portion of the foreshore where most damage would be done should the sea encroach much more.

2. At the time the survey was taken there was a considerable margin of beach, but it is liable to be washed away at any time and in a very short period. Last year the temple south of Messrs. Brown & Co.'s premises was attacked and it was dismantled to save the materials. The erosion commences from the point just above the salt gollahs. A rough stone revetment has at some time been constructed here to protect the building, but this is now mostly buried in the sand. Observations taken by the Inspector of Salt in five months of last year show that the maximum width of foreshore opposite the salt gollahs was 123 feet and the minimum was 30 feet.

3. Opposite the Custom House when the present survey was taken in October 1897, there was about 90 feet of foreshore, while in the same place in August 1896 the foundations of the wall recently built for the protection of the Custom House were partly exposed. This accretion and dissipation is constantly going on and must be due to the eccentric action of the littoral currents.

4. In 1896 in order to protect the Custom House and Flagstaff, a sea wall was built and this appears to have answered its purpose, as within two months of its completion the sea advanced right up to the wall and exposed a portion of the concrete foundations.

5. In a report written in December I remarked: "I have not been called upon to make any suggestions, but my opinion is that the time has now come for Government to resume all rights to the foreshore and build a continuous sea wall with marine road and ramps down to the beach wherever necessary for the purposes of trade. Under the existing system each riparian owner protects his own property in the manner which appears best to him and his efforts in addition to proving ineffectual may be detrimental to the interests of his neighbour," and I still hold to the same opinion.

6. Now as to the length of wall necessary, my view of the matter is that the salt gollahs are safe; the sea will encroach to within a few feet as it did last year, but that, I think, is about the limit. Where the protective works should commence is, I think, from a point opposite the lane running by Messrs. Volkart Brothers' premises and it should be continued to join on to the wall already built in front of the Custom House. This would be a length of 1,183 feet.

7. In designing the wall I have taken the foundations about 2 feet lower than the foundations of the recently constructed sea wall, fixing the bottom at about 2½ feet below low tide level. The foundations will be square wells (6 feet outside measurement) filled with concrete. The superstructure will be 10½ feet high and will be of laterite plastered with Portland cement.

8. The cost of the wall without ramps would be about Rs. 22,000, say with ramps, &c., Rs. 24,000.

9. The length being 1,188 feet, the cost would be approximately Rs. 20 per foot of length.

10. If it were considered necessary to start the protective work from above the salt gollahs, the length of wall required would be 1,866 feet and the cost about Rs. 37,500. In this amount is included the cost of a road between the wall and the godowns of the merchants. The location of ramps or steps down to the beach would have to be settled in communication with the various merchants. The estimate allows also for the filling in of the beach behind the wall up to road level. The area of beach thus reclaimed will be about 1½ acres.

11. No special provision has been made for cross drainage, but this will present no difficulty.

12. In my plan I have aligned the wall so as to give a minimum width of 25 feet between the wall and Messrs. Burnett & Co.'s premises and also between the wall and Messrs. Pierce, Leslie & Co.'s office, these being the two buildings which abut furthest on the beach. This width could, if considered desirable, be increased.

13. The work may, I think, be pronounced one of public utility, but I certainly think that the mercantile community should, if the scheme is carried out, bear a share of the cost as their interests are so directly involved. Whether the municipality also should be expected to pay their quota is also a matter for consideration; a fine open road would be made which would immediately become the thoroughfare instead of the narrow and tortuous lane at the back of the first line of godowns.

14. Please return plan if not required, as no copy has been kept.

C. No. 9/S.C.D. of 1898.

True copy submitted (with the plan to be returned) to Government with reference to G.O., No. 331, Marine, dated 6th April 1897.

2. I was unable to inspect the erosions in company with the Executive Engineer. We made one or two abortive attempts to visit Tellicherry simultaneously. But on each occasion some urgent business summoned one or other of us elsewhere. Mr. Wood and I however were both at Tellicherry in December on different dates and we both inspected the erosions made by the sea.

3. The owners of the premises affected have put up protective works at their own expense. Mr. Wood however considers these to be ineffective. There can in any case be no question that protective measures carried out by the Government along the whole line are likely to be more satisfactory than those carried out by different private persons independently of each other.

4. I would therefore recommend that Mr. Wood's proposals be approved if funds are available. No assistance can be expected from the municipality in the present state of its finances. But possibly the Tellicherry Chamber of Commerce might be willing to contribute something.

(Signed) G. W. DANCE,
Collector of Malabar.

WADAKKANCHERI,
16th February 1898.

ORDER—No. 207, Marine, dated 19th March 1898.

In his letter recorded with G.O., No. 331, Marine, dated 6th April 1897, the Honorary Secretary, Malabar Chamber of Commerce, brought to notice the serious inroads which the sea had recently made on the foreshore of Tellicherry between the Customs House and the Government salt godowns. The Executive Engineer was thereupon directed to report through the Collector as to the works necessary to protect this portion of the coast. It was at the same time distinctly announced that the Government did not pledge itself to undertake the protection of private property from public funds.

2. The required report has now been submitted. The Executive Engineer recommends the construction of a sea wall for a length of 1,188 feet at an estimated cost of between Rs. 22,000 and Rs. 24,000, and if the salt godowns are also to be protected, the length of the wall would be 1,866 feet and the cost Rs. 37,500.

3. A reference to the plan shows that the portion of the foreshore to be protected, omitting the salt godowns which are declared to be safe, lies in front of private property for the whole length of the proposed sea wall. If, therefore, it is decided to carry out the proposed works, it seems only fair that the merchants whose property will be protected should make a substantial contribution towards the cost. The municipality will also derive material benefit from the work, as pointed out by the Executive Engineer, and should thus also contribute. The work is not one which will benefit vessels entering or leaving the port. The view of the Presidency Port Officer that no portion of the cost is chargeable to Port Funds is therefore concurred in by Government.

4. It would appear from the Presidency Port Officer's report of his inspection made in December last that the foreshore had greatly improved since his previous visit to the port, and that sand had again accumulated along the places which suffered from erosion in the early months of last year. No immediate action thus seems necessary. If however the sea again encroaches to a dangerous extent, the Government will be prepared to carry out the requisite protective works, conditionally on at least two-thirds of the cost being forthcoming from local contributions. The plea that the municipality is unable to contribute cannot be admitted. It would be quite justified in borrowing for such a special and important work. The Collector will put the matter before the Municipal Council and the residents, and ascertain what contributions will be forthcoming in the event of the work being found necessary.

5. The sea wall proposed is probably the most effective form of protection, provided its front toe is secured from back scour by an apron of stone. Groynes at right angles to the shore, at intervals, might effect the same purpose, but not so certainly, and would probably cost nearly as much. An estimate for these will be submitted by the Superintending Engineer.

(True Extract.)

C. M. M. L.

Under Secretary to Government.

To the Presidency Port Officer.
 „ Collector, Malabar, with plan.
 „ Local and Municipal Department.
 „ Public Works Department.