بسم الله الرحمن الرحيم

SEAMARC Systems Engineering And Marine Consulting

Systems Engineering and Marine Consulting Pvt. Ltd.

Project Name: **STUDY FOR DREDGING HARBOR, CHANNEL AND SLIPWAY AT H.A. MAAFAHI**	**Country:** **MALDIVES**
Project Location within Country: HAA ALIF ATOLL	**Professional Staff Provided by your Company:** Team Leader; Surveyor
Name of Client: "Seagull Group Pvt Ltd"	**No. of Staff:** 2
Start Date (Month/Year): December 2006	**No. of Person-Months:** 2
Completion Date (Month/Year) January 2007	**Approx. Value of Services (in US$ equivalent):** USD 5,000
Name of Associated Firm(s), if any: None	**No. of Person-Months of Professional Staff Provided by Associated Firm(s):** Not Applicable

Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:

T. Le Berre : Team Leader
M. Athfal : Surveyor

Detailed Narrative Description of Project:

The agricultural and fisheries activity on Maafahi are increasing at a rapid pace, and the shallow harbor with little protection from wave action does not allow a practical access to the island, in particular for loading and unloading of the goods. The large vessels cannot approach the island and smaller vessels have to come back and forth. The larger safri boats being built on the island are unable to be went to sea, and a slipway and channel is required for the purpose.

The island is also submitted to important erosion, which needs to be taken care of.

Detailed Description of Actual Services Provided by your Company:

Dredging activities are potentially harmful to the environemt, with most damages occuring through direct physical impact or sedimentation due to the presence of plumes which may drift on coral areas. Improper coastal structures are known to cause major problems to the islands in the Maldives, which have a very dynamic sediment transport.

The assignment involved designing some structures which would not impair the natural transport of sediment along the coast, while achieving the goals of practicle access, harbor protection and hauling of vessels.

The disposal of the excess sediment from the dredging operations also had to be taken care of and plans for land reclamation in the areas submitted to erosion were also laid out.

To ellaborate the designs and work plan, the team took the bathymethry of the lagoon, studied the benthic conditions in terms to assess the possible damages to the living organism, as well as minmize efforts by examining the substrate and assess the difficulty which will be faced by the machinery.

Finally a report was done to present the works and findings, to assess the possible damages, present mitigation measures and finally seek approval from the Ministry of Environment, Energy and Water.

Firm's Name : Seamarc Pvt. Ltd.

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