

## **Ministry of Environment**

Male', Republic of Maldives.

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وسروع به دو مرود برسروسرع در دور بردن .

# Greater Male' Environmental Improvement and Waste Management Project

## **CIVIL ENGINEER**

#### TERMS OF REFERENCE

### A. BACKGROUND

Waste is one of the most visible threat to the environment and poses challenges to the development. Zone 3, which encompasses Greater Male', the inhabited islands in the Male' Atoll (Kaafu Atoll), North Ari Atoll (Alifu Alifu Atoll), South Ari Atoll (Alifu Dhaalu Atoll) and Felidhe Atoll (Vaavu Atoll), is estimated to generate 774 tons of mixed solid waste daily and currently lacks an organized and sustainable waste management system to properly manage this growing amount of waste.

Rapid urbanization and tourism development in the Greater Male' region including Zone 3 atolls waste is expected to increase by 924 tons per day by 2022. The region suffers from severe environmental pollution and deteriorating livability from inadequate collection and haphazard disposal of solid waste. Open dumping and burning of garbage at the 30-year-old dumpsite on Thilafushi island is an environmental and public health hazard posing a daily nuisance to the residents in Male' Villimale and neighboring resort islands, with plumes of smoke visible from Velana International Airport and surrounding resorts. Considering Maldives reputation as a pristine high-end tourist destination and its reliance on sustainable fisheries for food and export, pollution from improper waste management is a significant threat to the economy and environment.

In order to address the issue of growing amount of waste in the region, the Government of the Republic of Maldives has applied for financing from Asian Development Bank (ADB) towards the cost of Greater Male' Environmental Improvement and Waste Management Project. Part of this financing will be used towards the expenditure of the Project Management Unit (PMU) including staff salary and other incremental cost of the PMU.

#### B. PROJECT DEVELOPMENT OBJECTIVE

The development objective of the Project is expected to establish a sustainable solid waste management system in the Greater Male' by (i) improving collection, transfer, disposal, treatment, recycling and rehabilitating the existing dumpsite at K. Thilafushi, (ii) strengthening institutional capacities for solid waste service delivery and environmental monitoring, and (iii) improving public education, awareness and behavior in reduce, reuse and recycle (3R). The



Green Building, Handhuvaree Hingun, Maafannu, Male', 20392, Republic of Maldives. +(960) 301 8300 +(960) 301 8301 www.environment.gov.mv

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Project is being designed to reduce disaster risk and improve climate change resilience while creating a cleaner environment and reducing greenhouse gas emission.

## C. OBJECTIVES OF ASSIGNMENT

The objective of the assignment is to provide technical/engineering input and advice about activities undertaken under projects managed by PMU.

The Ministry of Environment (ME) now seeks professional service of a full time Civil Engineer to acquire technical support in development and implementation of Solid Waste Management Systems to server Zone 3.

#### D. SCOPE OF RESPONSIBILITY

The overall responsibilities of the Civil Engineer include, but are not limited to the following:

- 1. Work with project consultants and provide advice to the Project Director and Project Manager on all technical aspects of the Project;
- 2. Conduct inspection to project sites to monitor works and ensure compliance with general requirements of Engineering Standards/practices including the environmental and health and safety issues as applicable to the project.

#### E. RESPONSIBILITIES OF THE ASSIGNMENT

Under the supervision of the Project Director / Project Manager, the Civil Engineer would be responsible for, but not limited to the following activities:

- 1. Liaise with Projects stakeholders to ensure technical compliance of projects components with Project Approval Documents and Operational standards of regulators and donors.
- 2. Visit project sites and inspect the civil works of the waste management projects, including compliance of health and safety requirements, and give site specific suggestions where necessary.
- 3. Assist in designing/design Island Waste Management Centers (IWMCs) and preparing bill of quantities (BOQ).
- 4. Participate in providing technical input to support island waste management implementation activities. Technical input may include but not necessarily limited to the following activities:
  - a) Ensure all civil work/designs are in accordance with the government rules and regulations
  - b) Community mobilization and island waste management planning;
  - c) Procurement of local contractors;
  - d) Island waste management training; and
  - e) Performance monitoring and evaluation.
- 5. Provide technical input on projects consultancy documents as required;



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- 6. Participate in construction oversight activities during civil works and equipment installations, including site health and safety, and maintain regular meetings, maintaining logs and records of the progress, issue of change notices and approval of payments as may be required from time to time;
- 7. Participate in document review, evaluation and other relevant committees that may be formed under PMU Projects as required from time to time including but not limited to ADB review missions.
- 8. Participate in monitoring and evaluation of the project contracts managed by PMU including but not limited to the following:
  - a. Implementation schedules and budget;
  - b. Civil work performance against the component objectives;
  - c. Participate in funding agency review missions / or reviews carried out by the project as required; and participate in other committee meetings
- 9. Undertake other technical tasks as and when required by the ME.

This position is based at the offices of the Ministry of Environment in Male' but extensive travel to Islands (Project Sites) are required.

## F. QUALIFICATION, EXPERIENCE AND COMPETENCY

The Civil Engineer will report to the Project Manager and shall meet following qualification, experience and competency

Education

A Master's Degree or higher in Civil Engineering or a related field. Having studied environment elective subjects will be an added advantage.

Experience:

- Minimum seven (5-7) years of professional work experience of engineering designing. Or relevant field Experience with ADB/donor funded projects will be an
- Should possess sound knowledge of computer aided design software/applications Good interpersonal skills and communication

Language requirement

Should have excellent command of English Language with proven communication and, presentation and interpersonal skills.

### G. FACILITIES PROVIDED BY THE CLIENT

Successful candidate will be posted at Ministry of Environment, Male'. The following facilities will be provided;

- A proper workstation
- Computer system with necessary software installed
- Access to telephones and fax



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#### H. DURATION OF ASSIGNMENT

The project will be implemented in two phases and a three (03) year cycle in each phase. However, the successful candidate will enter into a contract for three years of the first phase of the Project. The staff will be appraised and assessed the performance annually and based on this appraisal the contract maybe extended for the second phase of the Project.

## I. Remunerations

Monthly remuneration from the project will be MVR 43,700

## J. Selection Criteria

The Civil Engineer will be selected based on the following criteria:

Selection Criteria	Weightage (%)
Relevant academic qualification(s)	40
Experience in similar works/ assignments	30
Interview	30

