



Republic of Maldives

EMPLOYER'S REQUIREMENT

for

**Remedial Work and Completion of
105 Housing Units at
Hdh.Kulhudhuffushi**

**Ministry of Housing and Urban Development
Issued on: January 2020**

1.0 Employers Requirement

Scope of Works

- a) This project includes 105 Housing units terminated at different stages of construction. The structure of all the Housing units is completed.
- b) 20 blocks, comprising of 100 housing units are located at site A and 1 block comprising of 5 Housing units are located at Site B as per the location plan given in annex 1A and annex 1B.
- a) The stages are categorized based on the progress of work as per annex 2.

CATEGORY	QTY
GREEN	32
YELLOW	6
BROWN	12
CYAN	20
MAGENTA	23
RED	7
PURPLE	5

- a) Progress of each of these housing units is presented in annex 3.
- b) Design of 100 Housing units and 5 housing units are different.
- c) A typical floor plan (Type A) for 100 Housing units is given in annex 4. Floor plans may vary. Bidders are to check and verify the floor plan and give price as per the as built.
- d) Typical floor plan (Type B) for 5 Housing units should be submitted by the Contractor after doing an assessment.
- e) The Works shall be carried out in accordance with the approved drawings, Bill of Quantities and standard technical specifications
- f) The Contractor shall be responsible for acquiring all the materials required for the completion of the housing units.
- g) 105 housing unit completions is a continuation of a partially completed structures, thus the Contractor is required to do a detailed assessment of the remaining works.
- h) Contractor is required to submit detailed drawings for the existing structures. The contractor shall submit the raw soft copies of all the below mentioned detailed design documents
 - (i) Architectural drawings

- (ii) Electrical drawings including wiring diagrams, lighting fixtures, control panels, etc.
 - (iii) Mechanical, including air conditioning and/or ventilation systems
 - (iv) Plumbing layout including pipe diagrams and schedules, fixtures, etc.
- i) Contractor is required to propose appropriate solutions and submit work methodology for repair of the existing structures which includes mould remediation, cracks, corrosion of exposed steel bars and repair of damp patches.
 - j) Contractor is required to remove all fixed elements of the units which are not complying structural standards
 - k) All purlins and rafters which are defected must be removed and replaced with an appropriate material and specification
 - l) All existing roofing sheets must be removed and replaced with an appropriate material and specification
 - m) All Rockwool insulations must be removed and replaced with an appropriate material and specification
 - n) All aesthetic wooden panels are to be removed.
 - o) Finishing works are to be carried out as per sub-clauses below
 - p) An elementary Bill of Quantities for the housing units are required to be submitted by the bidders as per the format attached at annex 5
 - q) Final drawings, detailed BOQ and technical specifications shall be provided by the Contractor and shall include provisions for all civil, architectural, structural, electrical, plumbing and firefighting disciplines, once detailed drawings are approved by the employer.
 - r) Contractor is required to remove and transport all construction waste and debris including the existing construction waste and debris to a waste management facility such as K.Thilafushi

1.1.1 Specific requirements:

1. Connection of utilities (electricity, water & sewerage) to that main lines shall be included for each individual units
2. Site clearing and demarcation of work zones and bypasses. Contractor is required to remove and transport all construction waste and debris including the existing construction waste and debris to a waste management facility such as K.Thilafushi

General guideline:

- a) **Electrical installation:** Wiring for lighting and power shall be concealed conduit except for spaces within DB's closet and area above false ceiling, which shall be exposed conduit/trunking. In each housing unit minimum of three electric sockets in each room and one data/media and telephone points shall be provided. All electrical wiring shall be in accordance with the guidelines set out by the State Electric Company Ltd (STELCO).
- b) **Fire Rating:** structural members and walls are to be designed to accommodate the requirement of the local fire department. All structures above the ground floor shall be designed for a minimum period of 2 hours fire rating.
- c) **Fire Protection System:** Portable fire extinguishers and microprocessor based addressable automatic fire detection and alarm services for life safety protection.
- d) **Site Visit:** The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- e) **Supervision, inspection & test plan:** the supervision, inspection and testing of the materials and works shall be carried out in accordance to normal industrial standards and practice, specifications, manuals and guidelines used in Maldives and as approved by MHUD.
- f) **Earthing System:** shall be installed in accordance with the requirement of BS Code of Practice BS 7430, IEC 62305 and Rules and Regulations of "STELCO" and "MEA" to provide a low impedance earthing systems and connections for equipment earthing.
- g) **Approval of Materials and Systems**
The materials and systems to be used in the building shall be approved by the Employer prior to use or installation.
- h) **Luminaires**
Adequate lighting shall be installed and the illumination levels shall generally be in accordance to international IES and IEC standards.

Sitting Room / Dining Room / Kitchen / Toilets	300 - 500 lux
Services Room / Garbage Room	200 lux
Store Room	200 lux
Corridor / Lobby	150 lux
Premises within Landscaped area	100-150 lux at working plane of 0.2m

1.1.2 Additional Information

1. Final price should be exclusive of the import duty for any imported construction material, equipment, machinery, etc.
2. The price also should include electricity and water required for the project.
3. Project costing - The project is a lump sum contract. The Contractor shall submit a work breakdown schedule within ten working days from project award, indicating the price break down and the durations for each task. The work breakdown schedule will then be used as a basis for measuring the works completed in order to issue the interim payments.
4. It is contractors' responsibility to allow for and obtain all the permits required from regulatory authorities / service providers etc.
5. Demolition waste and debris shall be transported to designated waste management site.
6. Finalized work schedule- The contractor shall submit a finalized work schedule within 10 days from the date of receipt of the Letter of Acceptance.

1.2 Expected Schedule of Finishes

Location/Area	Floor	Skirting	Wall	Ceiling	Partition	Doors/window
Common areas	Homogeneous/ Porcelain tiles	Homogeneous/ Porcelain tiles	Skim coating and emulsion paint	Fibrous board ceiling	Brick wall	Powder coated aluminum frame with tinted, clear or frosted glass where appropriate.

Sitting room & living area	Homogeneous/ Porcelain tiles	Homogeneous tiles	Skim coating and emulsion paint	Fibrous board ceiling	Brick wall	Powder coated aluminum frame with tinted frosted glass / Timber door frame with timber panels
Toilets	Non- slippery homogeneous tiles + 2 coats of waterproofing (brush bond)	-	Ceramic wall tiles	Fibrous plaster board ceiling	Brick wall	Powder coated aluminum frame with tinted frosted glass / Timber door frame with timber panels
Services room	Titanium finish	-	Skim coating and emulsion paint	-	Concrete / Brick wall	Powder coated aluminum frame with aluminum panels
Outdoor tiled area	Homogeneous tiles + 2 coats of waterproofing (brush bond)	Homogeneous tiles	Ceramic wall tiles	-	Concrete / Brick wall	Powder coated aluminum frame with tinted / clear glass

Materials, fixtures and fittings used on exterior walls and surfaces shall be weather-proof, external finishing materials, including fixtures and fittings.

All the major materials, fixtures and fittings shall be submitted to the Client for approval prior to installation or application.

1.3 General Design Obligations of the Contractor

1. The Contractor shall carry out, and be responsible for the design of the Works. Basic design shall be in accordance with the concept drawings provided. Detail Design shall be prepared by qualified designers who comply with the following criteria:

a) Architect

- i. A registered architect at his/her country with minimum 07 years of architectural design experience. Must have designed at least 2 buildings of similar scale within this period.

b) Civil/Structural Engineer

- i. A registered engineer at his/her country with 07 years of experience in structural design of buildings of similar scale.

c) Services Engineer

- i. Minimum bachelor's degree and 07 years of experience in service design of buildings of similar scale.

1.3.1 Tests on Completion

Upon completion of the building Contractor shall allow for testing of the services installed in the building as part of commissioning.

1.3.2 Contractors' Documents

The Contractor shall submit an assessment report which includes defects and work methodology for repair of the existing structures for approval of the Employer. Typical Floor layout of Type B Housing units is to be submitted. The floor plans should be to a scale of 1:100 or 1:200, and shall include the furniture layout, fixtures, fittings and the column positions. Upon completion of civil work, contractor is required to submit as-built drawings and final progress payment will be released upon approval of the as-built drawings. The materials used for construction shall be of good quality, with a design life of 50 years and where necessary design shall incorporate renewable energy and sustainable design components where practical.

1.3.3 The Bidder shall submit the following with the bid

1. Elementary Bill of Quantities as per the given format.
2. Proposed equipment for works and work methodology.
3. Proposed Personnel as per clause 1.3
4. Preliminary work schedule - The contractor shall submit a proposed work schedule with the bid. This work schedule shall indicate the major works to be carried out under the scope of the project. The work schedule shall clearly show the proposed

start and end dates for all the project stages and the total project duration proposed.