



The Maldives National University

Project Implementation Unit

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MNU Annex Building: Technical Design & Construction Directive

The Maldives National University (MNU)

1. Statutory & Development Controls

The Contractor shall ensure the design strictly adheres to the following project-specific constraints:

- **Maximum Building Height:** 45.0 meters.
- **Building Setbacks:** Minimum 1.0 meter from road-facing boundaries.
- **Building Projections:** Max 450mm (as sunshading). **Strict Restriction:** Projections may only extend into setbacks at a height of 6.0 meters and above.
- **Parking Allocation:** A minimum of 75% of the 280sqm footprint must be dedicated to parking. Setback areas are strictly excluded from parking calculations.
- **Integrate relevant United Nations Sustainable Development Goals (SDGs)** into the design, with primary emphasis on SDG 11 (Sustainable Cities and Communities) and SDG 15 (Life on Land) while also addressing other applicable SDGs.

2. Floor-Specific Engineering & Finishing

Basement Level: Structured Parking

- **Structural:** Waterproofed reinforced concrete retaining walls.
- **Floor Finish:** Heavy-duty, non-slip power-troweled concrete or industrial-grade epoxy.
- **Mechanical:** Mandatory mechanical ventilation system to international air-quality standards for enclosed spaces (*Brief Section 3.5*).
- **Fire Safety:** Addressable smoke detectors (**FS-06**) and 9L Water extinguishers (**FS-02**).

Ground Floor: Restaurant/Canteen & Student Lobby

- **Flooring:** 600x600mm Homogeneous Polished Tiles (**T-01**).
- **Walls:** Washable Matt Emulsion Paint (**P-03**) for high-traffic student use.

- **Kitchen Services:** Integrated grease traps and specialized high-volume kitchen exhaust systems (*Scope 3.5*).
- **Fire Safety:** Fixed temperature heat detectors (**FS-07**) in kitchen zones.

First Floor: Conference Hall

- **Layout:** Open-span architectural design to maximize seating capacity and sightlines.
- **Ceiling:** Decorative recessed 600x600 LED Panels (**E-02**) with dimming capabilities.
- **Acoustics:** The contractor must provide wall-mounted acoustic backing/conduits to facilitate sound-dampening panels.

Second Floor: MNU Medical School Facilities

- **Hygiene Standard:** Anti-static, chemical-resistant homogeneous flooring with coved skirting. Walls finished with antibacterial paint.
- **Lab Infrastructure:** * Dedicated laboratory fume extraction systems independent of building HVAC.
 - Reticulation for specialized lab water, medical gases, and drainage.
 - **Built-in Fixtures:** Laboratory-grade workbenches with chemical-resistant tops.
- **Fire Safety:** CO2 Fire Extinguishers (**FS-01**) for sensitive medical and electronic equipment.

3. IT, AV & Security Infrastructure (D&B Skeleton)

The Contractor must install the "backbone" infrastructure to support MNU's technical operations (*Scope 3.5*):

- **Data Network:** Fiber Optic (Single-mode) vertical backbone; CAT6 horizontal cabling to all points (**EIA/TIA 568-B standard**).
- **AV Provisions:** 50mm Ø concealed conduits for AV signal cables in the Conference Hall and Lab zones.

- **CCTV Infrastructure:** PoE (Power over Ethernet) cabling to all parking entry/exits, lobby areas, and elevator cars.

4. Mandatory MEP & Life Safety

- **Fire Alarm:** Fully addressable Fire Alarm Control Panel (**FS-08**) with battery backup.
- **Lighting:** 18W LED Downlights (**E-01**) and Emergency Exit signs (**FS-05**) on all escape routes.
- **Vertical Transport:** High-speed passenger lifts compliant with the total 15-story load requirements.