



## UNDP Expression of interest

UNDP *Nepal* invites interested companies to apply on the following:

### **Summary of proposal:**

The project aims to construct a Shock Table as part of developing of research facility in Nepal. A 20 ton payload capacity shock table with plan size 6m x 3.6m has been proposed to be constructed in the premises of Institute of Engineering, Pulchowk, Kathmandu. The Expression of Interest (EoI) is requested from interested steel fabricators or construction companies (Contractor), who are willing to provide services for supply and installation of the shock table including associated civil works. Start date of the call is 4<sup>th</sup> November 2019 and End date is 11<sup>th</sup> November 2019.

The shock table includes, i) a 6m x 3.6m structural steel deck mounted on wheels, ii) rails on which the wheels roll, iii) a 2,000 kg pendulum fabricated from steel plates for impacting the deck, iv) a 3 m high structural tower for mounting the pendulum, v) a 2,000 kg capacity winch mounted on the tower, vi) reinforced concrete foundation for the deck and tower, vii) other associate civil work. (Construction of building/enclosure for the table is not a part of this contract)

The Contractor shall provide the following goods/services (all complete):

- Fabrication and supply all structural steel work,
- Supply and construction of foundation for the shock table and pendulum mounting structure,
- Construction of other associated civil work,
- Winch,
- Springs, and
- Other associated elements, as required.

All the work completed is required to be of high accuracy. (*Refer to Annex for preliminary drawings of the table.*)

UNDP will provide the design and specification of the shock table. However, the Contractor is responsible for procurement, supply of all construction material and labour; fabrication, installation of the table to the required specifications and tolerances and providing assistance during commissioning of the shock table.

The key activities are:

- Construction and installation of shock table testing facility
- General specification of the proposed shock table are:
  - Weight (deck, pendulum, pendulum mounting structure): 8-ton structural steel
  - Size of deck/ table: 6 m x 3.6m
  - Height of pendulum mounting tower: 3m
- Technical Specification: Deck, tower and pendulum are to be constructed of fy=250 grade steel or similar. The wheels and rails are to be fabricated of high strength steel. Reinforced concrete elements will be fabricated out of TMT rebars (fy = 500MPa) and concrete grade 25 MPa.

### **Outputs:**

The final output of the project will be a shock table (whole system) for research on earthquake resilience of buildings, particularly masonry buildings. The buildings will be mounted on the deck and impacted by pendulum to create shaking of the deck.

### **Eligibility criteria**

The Contractor should have the following capacity. Contractor could collaborate with other companies to enhance their capability:

**Workshop:**

The Contractor should have workshop (owned or leased) with minimal equipment such as lathe, welding, milling, shaper, drilling, gas cutters, etc.

**Manpower**

The Contract should have at least the following principle manpower on their roll:

1. Diploma Engineer or above (Mechanical Engineering) with at least 15 years of relevant working experience on design and construction of machines, structural steel fabrication,
2. Diploma Engineer or above (Civil Engineering) with at least five years of working experience on design and construction of building and civil works,

**Experience:**

The Contractor should have at least five years of working experience on construction and fabrication of structural steel structures, with turnover of NRS 2,500,000 per year.

List of attributes	Benchmark
Years of experience	5 years on construction and fabrication of Structural steel structures
Average Turnover of last 3 years	NPR 2,500,000
Minimum equipment	lathe, welding, milling, shaper, drilling, gas cutters

*Only short-listed firms shall be considered for the bid solicitation.*

**Submission details****- What to submit**

A brief description and profile of the firm together with the organization structure and key staffing. In particular, the information must include:

- Experience of the firm in fabrication of structural steel/ construction of civil work,
- Workshop details including machine/ tools owned or available in the workshop,
- Brief curriculum vitae of the principle staff with experience in the above-mentioned areas.

**- How to submit**

**Regular mail** addressed in a sealed envelope clearly mentioning “EOI for Construction of Shock Table” to:

**UNDP Registry, UN House, Pulchowk, Lalitpur**

**- When to submit** (deadline=> Expression of interest and statements of qualification must be delivered to the address below by 11/11/2019)

**- Other relevant details as applicable**

Interested Companies must provide information indicating that they are qualified to perform the services (brochure, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Companies/Consultants may associate to enhance their qualifications.

Companies will be selected in accordance with the procedure set out in the UNDP Procurement Guidelines and UNDP Financial Rules and Regulations.

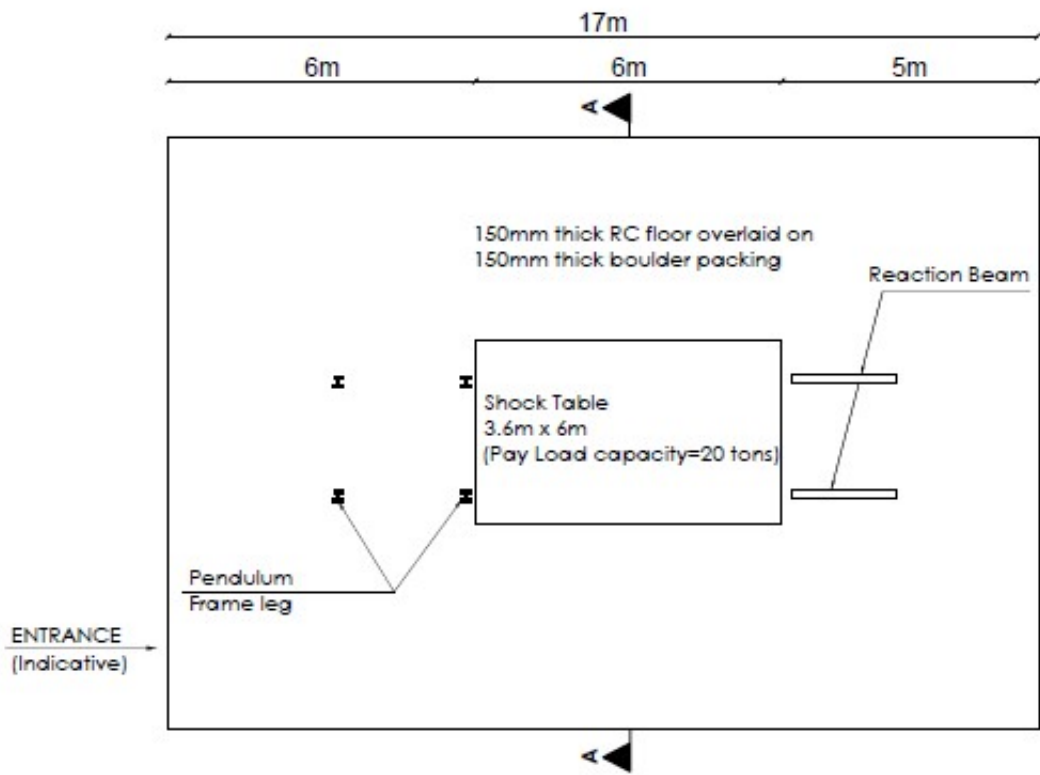
The EOI and accompanying documents must be received in a sealed envelope no later (11/11/2019) clearly labeled “Description of Work, services, goods”. Documents sent by e-mail or facsimile will not be accepted. EOI received after the above deadline will not be considered.

EOI from suppliers failing to provide the request information will be disregarded. Invitations to bid and any subsequent purchase order will be issued in accordance with the rule and procedures of UNDP.

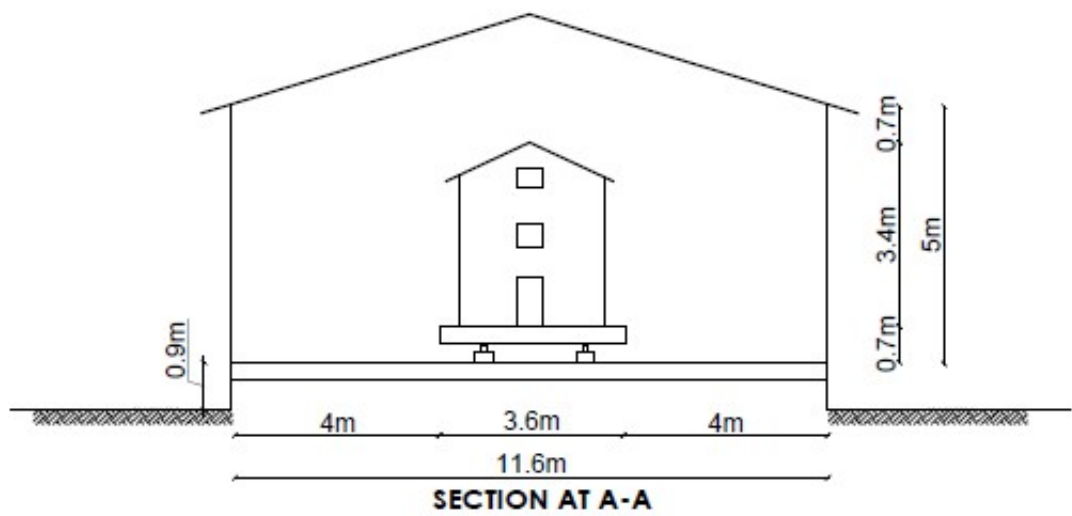
This EOI does not entail any commitment on the part of UNDP, either financial or otherwise. UNDP reserve the right to accept or reject any or all EOI without incurring any obligation to inform the affected applicant/s of the grounds.

Interested consultants may obtain further information at the below address.

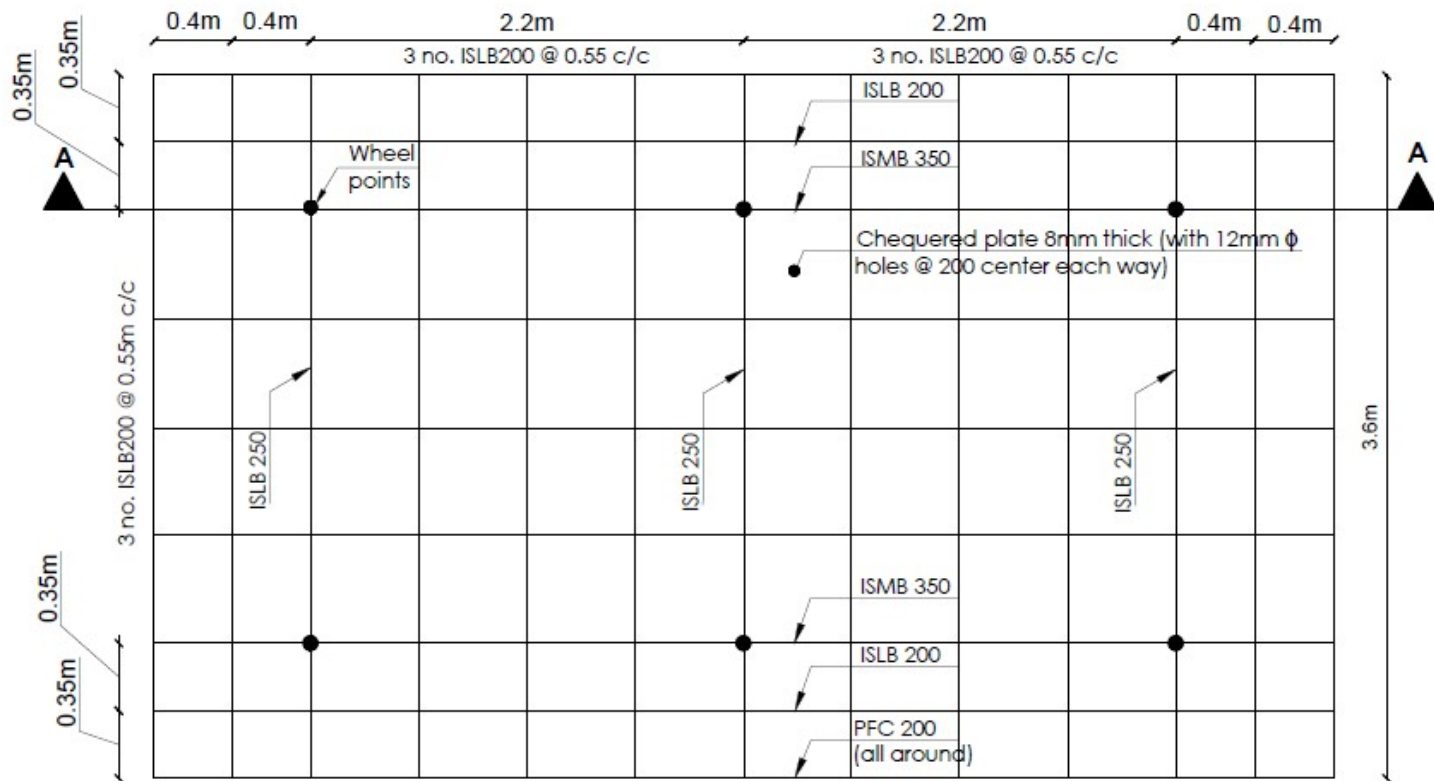
Annex: Shock Table Test Center



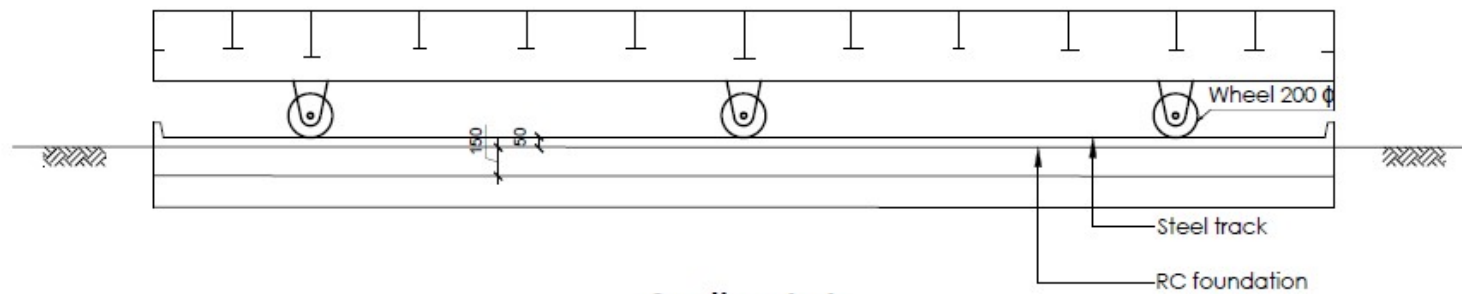
**BUILDING PLAN**  
(Schematic only)



For Concept only not for construction



Plan



Section A-A

Shock Table General Structural Layout



