**1. Introduction**

This Scope of Work (SOW) outlines the requirements for the structural evaluation of three residential buildings as part of Tbilisi Hills Residential Complex. The project comprises three buildings, two of which are identical buildings located on different elevations and one is slightly modified version.

**2. Objectives**

The primary objective of this consultancy is to ensure that the structural design, calculations, and Bill of Quantities (BoQ) for the three buildings meet all applicable safety and building codes (in Georgia), and are optimal for the proposed construction sites' geographical and environmental conditions.

**3. Scope Description**

The Consultant will be responsible for the following tasks:

**3.1 Detailed Structural Evaluation**

The Consultant will perform a detailed analysis of the structural design of the buildings. This includes evaluating the strength, stability, and rigidity of the structures. The analysis will also consider the effects of loads and forces on the structures due to their different elevations.

- Review and verify all structural designs and architectural plans for compliance with the latest building codes and standards.

- Assess the suitability of the structural designs in relation to the geographic and environmental conditions of the sites, particularly the different elevations of the two identical buildings.

- Evaluate the structural design solution in the middle of the building of the Atrium structure and its stability considering that both sides of atrium will be glazed with large format aluminum profile tempered glass.

**3.2 Analysis of Structural Calculations**

The Consultant will verify the structural calculations for the buildings. This includes checking load calculations, material strengths, and structural safety factors.

- Evaluate the structural calculations provided, ensuring they are accurate and sufficient for all three buildings and their atriums.

- Identify potential areas of over-design or under-design and recommend adjustments accordingly.

**3.3 Bill of Quantities (BoQ) Review**

The Consultant will review the BoQ provided for the project. This includes checking the quantities of materials, the descriptions of work, and the estimated costs.

- Critically analyze the BoQ provided for each building to confirm it accurately reflects the scope of work and resources required.

- Suggest potential cost-saving measures or areas where additional resources may be necessary.

**3.4 Site Inspections**

The Consultant will conduct site inspections to assess the actual conditions of the buildings and their surroundings. This will help in identifying any potential issues that might not be evident in the design documents.

- Conduct site visits to all three locations to understand the terrain and site-specific challenges that may impact the structural integrity (as excavation works have been already completed).

- Verify that the site conditions are as per the assumptions made in the structural design and calculations.

**3.5 Reporting**

Upon completion of the evaluation, the Consultant will prepare a detailed report outlining their findings. The report will include any identified issues, recommendations for improvements, and an assessment of the overall structural integrity of the buildings.

- Provide a comprehensive evaluation report detailing findings, concerns, and recommendations for each building.

- Include a final assessment report with all suggested modifications to the designs, calculations, and BoQ.

**4. Deliverables**

The Consultant will present their findings to the project stakeholders. This will include a discussion of any identified issues, proposed solutions, and next steps.

- Initial Assessment Report: Due within 7 days of project commencement.

- Final Evaluation Report with Recommendations: Due within 14 days of receiving updated project from the designer.

**5. Timeframe**

The total duration for the structural evaluation is expected to be 21 days from the date of contract signing, not including the time for intermediary corrective actions.

**6. Consultant Qualifications**

- Proven experience in structural engineering for residential buildings.

- Licensed structural engineer with a minimum of 10 years of experience in the field.

- Prior experience with projects involving buildings on varied elevations is highly desirable.

**7. Proposal Submission**

Proposals must include:

- Detailed approach and methodology for the structural evaluation.

- A proposed timeline with milestones and deliverables.

- Company profile, including past experience and qualifications of the team.

- Financial proposal detailing all costs associated with the services.

Tender documents shall be submitted in hard copy (1 copy).

Bidding documents shall be submitted in a sealed envelope and approved with a signature. Sealed envelop should be delivered at Tbilisi Hills head office no later then 24th of May 2024.

A hard copy of the bidding documents shall be certified with the signature of the director of the company and the seal of the company (if any).

**8. Evaluation Criteria**

Proposals will be evaluated based on:

- Technical expertise and demonstrated past performance.

- Completeness and feasibility of the proposed approach.

- Cost-effectiveness and value for money.

**9. Contact Information**

For further inquiries and proposal submissions, please contact:

- Name: Lela Vakhtangishvili

- Position: Head of procurement department

- Email: lela.vakhtangishvili@tbilisihills.com

- Phone: +995 598 29 99 91

**Tender documents shall be submitted no later than 24 May, 2024, at 18.00 (Georgian time).**

**The structural documentation can be found in the link below:**<https://drive.google.com/drive/folders/1_wFKNJR359i6yA-Dq3Ywc9v28QdzhUrU>